1994

Impact of mode of death on the bereavement experience: Suicide, accident, and natural death surviviors compared.

Steven Emil. Marykuca
University of Windsor

National Library
of Canada

Acquisitions and
Bibliographic Services Branch

395 Wellington Street
Ottawa, Ontario
K1A 0N4

Bibliothèque nationale
du Canada

Direction des acquisitions et
des services bibliographiques

395, rue Wellington
Ottawa (Ontario)
K1A 0N4

Your file Votre référence

Our file Notre référence

NOTICE

The quality of this microform is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us an inferior photocopy.

AVIS

La qualité de cette microforme dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade.

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de qualité inférieure.

Canada

IMPACT OF MODE OF DEATH ON THE BEREAVEMENT EXPERIENCE: SUICIDE, ACCIDENT, AND NATURAL DEATH SURVIVORS COMPARED

by

Steven E. Marykuca

B.A. University of Manitoba, 1992

A Thesis
Submitted to the Faculty of Graduate Studies and Research
through the department of Psychology
in Partial Fulfilment
of the Requirements for the
Degree of Master of Arts at the
University of Windsor

Windsor, Ontario, Canada
1994

ISBN 0-612-01412-6

Canada

ABSTRACT

In order to investigate the influence of different types of death on grief, 350 previously bereaved college students completed a questionnaire package consisting of the Grief Experiences Questionnaire (GEQ), the Impact of Event Scale (IES), the Texas Revised Inventory of Grief (TRIG), and a series of questions assessing additional aspects of grief. Participants were separated into four groups based on the mode of death experienced as either survivors of suicide (n=34), accident (n=57), anticipated natural (n=157), or unanticipated natural (n=102) deaths. Multiple regression analyses indicated that suicide survivors, when compared with survivors of the other modes of death, experienced more frequent feelings of being rejected by the deceased, responsibility for the death, "unique" reactions, and total grief. Further, trends were evident wherein suicide survivors reported increased levels of shame and perceived stigmatization. Regarding aggregate factors, deaths which were unanticipated, as compared to those that were anticipated, resulted in a heightened searching for explanation regarding unanswered questions surrounding the death, while, contrary to expectations, a trend was evident with survivors of natural deaths reporting more guilt than survivors of unnatural deaths. Implications of the finding that suicide survivors oftentimes experience components of grief which are uncommon in other forms of death are considered, and recommendations for future research are discussed.

ACKNOWLEDGEMENTS

I would like to take this opportunity to offer my sincerest gratitude and thanks to the following individuals for their dedication and assistance toward the completion of this project: First and foremost, to Dr. Michael Kral, who gave so generously of his time, knowledge, and friendship throughout the course of this study; Dr. William Balance and Dr. Sharon McMahon for expending the time and energy to serve as committee members; Dr. Frank Auld for his input; Ms. Katy Dunham for her patience, new coffeepot, and invaluable statistical assistance; the rest of the Suicidology Research group (including "Will-o") who pitched in with a host of good suggestions at those many biweekly meetings, and Ms. Pamela Meloche for her helpful comments and friendship through all of this. I would also like to thank two very special people who have supported and encouraged me over the years; my father, for his unwavering support and love, and Patricia Jackson, the "old fossil," who gave her heart. Finally, I would be remiss if I did not refer here to my mother, who, even though she is no longer alive to share in my triumphs and tragedies, always knows just how to guide the ship gently from above.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER 1

INTRODUCTION

The practical importance of the analysis of bereavement was noted by Carr (1975), who wrote:

> Its ubiquity, its diversity in expression, and its sometimes unrecognized yet other times intolerable effects make bereavement one of the greatest challenges facing students of human behavior. The understanding a culture can bring to the bereavement process may well be a measure of its basic humanity. (p. 8).

The death of a loved one represents one of the most stressful events that an individual will experience during his or her lifetime (Holmes & Rahe, 1967). When a loved one dies, those that are bereaved (i.e., those that have sustained a loss by death of another person) are faced with many challenges. Bereavement refers here to the objective event itself, the death or loss event, and represents the definitive and irrevocable cessation of contact with the recently deceased person (Cleiren, 1993). The resulting personal experience of the situation as it unfolds for those that have been bereaved is known as the bereavement *process*, which can be conceptualized as being composed of two components: grief and mourning. Following the definitional preferences of Parkes and Weiss (1983), the term "grief," as used in this paper, refers to the bereaved person's overall reaction to the loss, whereas "mourning" will refer

more specifically to the outward, or observable, display of this grief.

Grief is not a state, but is rather a process (Parkes, 1970). Hauser (1987) notes that rituals of mourning (e.g., funeral services), common in most cultures, serve the function of helping the bereaved person to grieve, that is, to experience and possibly express feelings, thoughts, and memories related to the loss of the deceased. The bereavement process, which encompasses the affective, cognitive, behavioral, physiological (such as heightened or diminished somatic functioning), and social response pattern changes of the bereaved individual after the death represents the natural reaction to the loss of a significant person in one's life (Hauser, 1987).

The death of a loved one can occur through many different means. Death can occur due to natural causes, an accident, a murder, or an individual's conscious decision to end his or her life. Some authors propose that when a person chooses to commit suicide, which represents in itself a voluntary and conscious rejection of life, those who are bereaved are at greater risk of developing complications during their grieving (Henley, 1988). Shneidman (1972) stated that:

> "...the person who commits suicide puts his psychological skeleton in the survivor's emotional closet - he sentences the survivor to deal with many negative feelings, and, more, to become obsessed with thoughts regarding his own actual or possible role in having precipitated the suicidal act or having failed to abort it" (p. x).

Henley (1988) further commented that "...bereavement following suicide may, as has been suggested, be more difficult than that following other forms of loss, with greater proneness to guilt; feelings of rejection, abandonment, and worthlessness; depression, self-destructiveness, and other manifestations of pathology; and incomplete mourning" (p. 473). The fact of suicide is seen in both of these views as an impediment to healthy grieving. Those that are left to grieve a suicide, whom we call "survivors," are faced with the tremendous challenge of assimilating the loss within themselves and of necessarily readjusting their world to reflect not only the fact that the deceased is no longer alive, but also the fact, that the deceased has chosen it to be so.

As one grieves the loss of a loved one, the pain that one feels encompasses many specific manifestations and reactions (Alexander, 1991; Hauser, 1987; Van der wal, 1989). According to theorists such as Bloom (1986) and Shuchter (1986), some of the components of the bereavement experience are as follows: a sense of shock and disbelief, somatic reactions, a sense of loss, anger (at the deceased, at the medical/helping professions, at God and fate, at family and friends, at oneself, at the fact that this happened), guilt, anxiety and fearfulness, feelings of helplessness, searching and pining for the deceased, intrusive images, mental disorganization, relief, apathy, great sadness, and loneliness

When the person who is grieved killed himself/herself, grief is posited to contain specific reactions that are either not common to other modes of death or more extreme. Barrett and Scott (1990) list these as: a pervasive search for

explanation, stigmatization, shame (embarrassment), guilt, a feeling of responsibility for the occurrence of the death, a feeling of being rejected by the deceased, self-destructive behaviors, and a loss of social support. Worden (1982) pointed out that, in addition, the fear of one's own self-destructive impulses, as well as self-blame for missing clues that the person would kill him or herself (issues of responsibility) are issues that suicide survivors must deal with. Shneidman (1969) wrote that as soon as a suicidal death occurs, survivors have lost an inalienable right, that being the right to live an unstigmatized life.

Suicide is an event which happens quite frequently in North American society. Recent figures reveal that in the United States alone in 1988, roughly 30,000 people chose to take their own lives (Ness & Pfeffer, 1990), while McIntosh (1993), reported the same figure for 1991. Some authors strongly feel that this is an underestimate because many deaths that appear to be due to suicide are not reported as such. Underreporting occurs due to such factors as a general reluctance to classify deaths as suicide, the lack of a standard definition of suicide, and the uncertainty of the intentions of the victim in a certain number of deaths. Official statistics for completed suicides are therefore most likely conservative and underestimate the true extent of the problem (McIntosh, 1987).

Just how many survivors of suicide are there in today's society? This frequently asked question yields no exact answer, but some indication of the true extent of the survivor population can be derived from various figures and

estimates available regarding the number of completed suicides. The actual number of completed suicides is relevant, because for every completed suicide, a circle of loved ones ("survivors") usually remain to grieve the loss. Carter and Brooks (1991) define a survivor of suicide as "someone who is left behind to deal with the psychological distress and daily turmoil in the aftermath of a completed suicide" (p. 231). Kastenbaum (1977) spoke of the "multiple victims" in a suicide: the person who dies and the surviving family members. It is not only family members who grieve the loss, however, as friends, lovers, colleagues, and the community, also feel the pain of loss. A conservative estimate holds that for every successful suicide, at least six people are strongly affected by the tragedy (Shneidman, 1969). Shneidman (1972) suggested that at least 300,000 additional people are added to the existing survivor population annually, while Worden (1982) estimated that 750,000 new people per year (a higher estimate than is normally made) grieve because of suicide.

In terms of the total number of suicide survivors within the United States alone, Andress and Corey (1978) estimated this figure at well over one million individuals. More recently, McIntosh and Kelly (1992) estimated this population to be in the neighbourhood of 3 million people. It has been noted that "such a significant number of people represents a major mental health population" (McIntosh, 1986, p. 355). Given that suicide rates have been rising in recent decades (McIntosh, 1987), one is left to wonder about the true extent of the survivor population. Regardless of the existence of a precise figure, it can

readily be seen that survivors of suicide represent an extensive population. Each and every day more survivors are added to this already large number.

Empirical research on suicide has traditionally focused on the person who commits the act. In fact, McIntosh (1985) noted that a comprehensive bibliography of suicide covering the years 1897 to 1970 listed only 15 references related to suicide survivors. This focus on committers remained pervasive until quite recently, when researchers started to focus more of their attention toward the study of those that survive a suicide. In his own bibliography, McIntosh (1986) listed over 70 references which have come out since 1980, and a 1993 addendum obtained from J. L. McIntosh (personal communication, July 19, 1993) listed more than 200 recently published (1986-1992) English sources. As can be seen, this new focus has started to gain momentum, and has generated much in the way of new information regarding survivors and their grief-work. However, this line of research is still in its formative stages, and as such, definitive statements about the specific nature of the consequences that suicide has on survivors should be made cautiously.

Given the above discussion regarding the prevalence of suicide survivorship, a related concern deals with the extent to which the fact that the death is attributed to suicide (as opposed to another mode of death) in the survivors perception puts suicide survivors in a different position in terms of the bereavement process. It is important that researchers seek to better understand the nature of the role of suicide on the subsequent functioning of survivors. The

large population of survivors attests to the need for greater and more accurate empirical knowledge about their personal responses and adjustments. A more complete understanding of the nature of the experiences of survivors can not only aid in the development of effective helping strategies for those who require them, but additionally lends itself to the promise of a more sensitive and thoughtful response directed toward the recently bereaved by caregivers and others outside the "circle of impact" (quoted material provided by S. McMahon, personal communication, 1993).

Current thinking holds that there are two possible outcomes when assessing the bereavement experiences of suicide survivors when compared to survivors of other modes of death. On the one hand, suicide survivors can be viewed as experiencing a different bereavement experience than that experienced by non-suicidally bereaved individuals (Hiegel & Hipple, 1990; Schuyler, 1973; Seguin, Lesage & Kiely, 1993; Van Dongen, 1988, 1990). These authors note that the experience can be different in a couple of ways. First, it may be a more severe and painful one (i.e., in terms of more severe manifestations of grief reactions). Second, it may in some ways be qualitatively different (i.e., differential problems and issues which compose the bereavement process). These potential differences are thought to place a greater burden on the bereaved who grieve a suicide, thus making suicide survivorship a more difficult and challenging obstacle than it otherwise would be when/if the death being grieved was not self-inflicted. The other viewpoint (McIntosh, 1993) is that

response to a suicide is not significantly different from responses to other modes of death. From this viewpoint, a death by any means gives rise to roughly equal reactions in those who subsequently grieve.

Clinical wisdom, as well as intuitive reasoning, has long supported the view that suicide survivors do experience a significantly more difficult and painful bereavement process (see also Chance, 1988; Schuyler, 1973). Lindemann and Greer (1953), in their seminal report, stated that:

> "...the survivors of suicide are likely to get 'stuck' in their grieving and to go on for years in a state of cold isolation, unable to feel close to others and carrying always with them the feeling that they are set apart or under the threat of doom" (p. 12).

More recently, Calhoun, Selby, and Selby (1982) stated that "Clinical opinion has been that grief in cases of suicide is uniquely different from grief in cases of death from other causes" (p. 409). Assertions such as these have been both supported and challenged by ongoing empirical research in the survivor literature. Support for the proposition is widespread (e.g., Barrett & Scott, 1990; Demi, 1984; Hauser, 1987; Seguin et al., 1993; Van Dongen, 1990; Wrobleski & McIntosh, 1987). However, even in those studies that do lend some empirical support to the notion that the bereavement process is more difficult in the case of a suicide, data are often either equivocal or contradictory. Thus, there are indications that differences, although apparent in some research studies, are neither as widespread nor as significant as has previously been hypothesized.

Ethical Considerations

Research that seeks to examine various facets of response to the death of a loved one is difficult to conduct because of the existence of valid moral and ethical concerns regarding the well-being of the bereaved. The possibility that research may have adverse effects on those who consent to participate is an important issue in need of serious consideration. A common sense concern regarding the sensitive and often times precarious situation of the recently bereaved dictates the utilization of an empathetic and thoughtful manner of recruitment and interviewing of survivors soon after the bereavement. Saunders (1981) noted that recruitment of recently bereaved individuals is a task requiring care and sensitivity on the part of the investigator. She specified that "care must be exercised to avoid methods of inviting participation that may be indirectly coercive through increasing feelings of guilt or helplessness" (p. 330). In addition to recruitment, the procedures utilized to gather the data of interest must also be respectful of the position of the newly bereaved.

Within the published literature, two empirical studies have been conducted which support the efficacy of the interview technique with recently bereaved individuals. Asgard and Carlsson-Bergstrom (1991) conducted follow-up interviews with individuals who had previously been interviewed within one month after the death of their loved one. One-third of the subjects reported that the initial interview shed new light on the suicide and two-thirds considered the interview emotionally beneficial. It was concluded that the initial interview was a

positive or neutral experience for 54 subjects and was negative for six. Runeson and Beskow (1991) utilized a similar follow-up interview to assess the impact of the initial interview and found that many subjects seemed to benefit from the single initial interview. They recommend the utilization of a cautious and sensitive interview procedure, as this appeared to be an acceptable method of assessing survivor reactions.

Grief Research: Methodological Concerns

In addition to the concerns noted above regarding the ethics of conducting suicide survivor research, issues of concern also arise regarding the validity of the findings of such research. Methodologically, grief research is difficult to conduct, and as such, the research designs employed are often utilized not because of their ideal suitability to investigate the issue(s) of interest, but rather because they satisfy concerns of convenience and necessity. Such designs are plagued with multiple problems, as outlined below, which serve to make generalizations of the findings of this literature tenuous.

Among the most frequently noted methodological problems are those pertaining to the retrospective nature of the vast majority of the investigations, the typically small sample sizes of published reports, and the use of non-standardized instruments to measure grief reactions. The lack of explicitly stated operational definitions for the measured constructs also hinders the interpretability of many reports. Standardized measures (with published reliability and validity data) have been developed to assess specified facets of

grief [Grief Experience Questionnaire: Barrett & Scott (1989); Texas Revised Inventory of Grief: Faschingbauer (1981); Hogan Grief Reactions Checklist: Hogan (1988) as cited in McIntosh, Arnett, & Thomas (1992); Grief Experience Inventory: Sanders, Mauger, & Strong (1985)]. The use of such instruments in current and future research investigations has been widely advocated (McIntosh, Arnett, & Thomas, 1992).

The use of self-selected populations is another important limitation of much published research. Specifically, much survivor research utilizes support group participants. A concern with this selection process is that by predominantly studying the experiences of this subgroup of bereaved individuals, we may be getting a distorted picture of the experiences of the majority of survivors who have no contact with support groups of any kind after the death of a loved one. A related concern is the possibility that even in research investigations that do not explicitly recruit participants through support groups, a proportion of the sample that is obtained may in fact be former support group attendees. If not recruiting through a support group is done to eliminate the initial self-selection inherent in such samples, then it becomes important to ascertain the proportion of one's sample that in fact has attended a support group at any time following the death. This knowledge, if obtained, would allow for analyses to be made as to the extent of any differences between past support group attendees and non-attendees.

The amount of time that has elapsed since the death seems also a critical, though neglected component, of survivor grief research. Wrobleski and McIntosh (1987) found a significant correlation between increased elapsed time since death and decreased guilt. The vast majority of published work is cross-sectional in nature, and thus does not allow for a direct assessment to be made regarding the nature of changes in the bereavement process that occur over time. The relative paucity of longitudinal comparison group studies (the exceptions are projects by Cleiren, 1993, and Farberow, Gallagher, Gilewski, & Thompson, 1987, 1992) clearly constrains our accumulated knowledge. Perhaps some of the inconsistencies found when attempting to compare the results of studies in this area may be attributable to the wide variation in time since the death. Since changes in the grief process over time can best be assessed through the use of longitudinal designs, their scarcity is particularly troubling.

Another primary concern is the failure to utilize comparison groups composed of those bereaved through different modes of death (as well as non-bereavement control groups where this is feasible). If one wishes to study how grief engendered by the suicide of a loved one may be unique from grief resulting from other modes of death, (and may therefore differentially affect the bereavement process) comparison groups are critical. Unfortunately, control groups have not been widely used, nor until very recently cited, within the empirical literature. In fact, McIntosh (1993), in a thorough review of the

literature on suicide survivors, located only 14 published empirical investigations in which comparison groups were utilized.

Comparison group methodologies are critical for the analysis of a factor that has long been studied in the general bereavement literature, this being the suddenness with which the death occurred. Many investigations (e.g., Glick, Weiss, & Parkes, 1974; Parkes & Weiss, 1983) have shown that deaths that occur with little or no forewarning appear to cause more intense grief and poorer overall functioning in those who subsequently grieve as compared with deaths which are expected. It thus follows that in order to assess the potential influence of the suddenness of death, at least one of the comparison groups should be composed of individuals whose loss did not occur suddenly (i.e., deaths attributable to the long-term progression of an illness).

Another factor that may play an important role in the understanding of the reactions of suicide survivors was noted by Andress and Corey (1978), who believed that a particular subgroup of suicide survivors may be especially vulnerable to the occurrence of negative after effects. These survivors are those who either discover the body or witness the action of suicide. The authors recommended further empirical analysis of the impact of this factor on the subsequent reactions of this subgroup of survivors. Despite the fact that this recommendation makes intuitive sense, published research has not, as yet, adequately addressed this concern by including these variables into consideration. Additionally, the survivor's perception of the preventability of the

death (Bugen, 1977) is another factor which has thus far received sparse attention within the suicide survivorship literature. Other important factors that may have an influence on the post-loss functioning of survivors and that tend to vary considerably between studies include (a) the nature of the relationship (both in terms of kinship and the degree of attachment/closeness) between the survivor and the deceased, (b) the age of the deceased, and (c) the age of the respondent. Finally, survivor research has been primarily derived from the experience of spouses (predominantly widows), females, and caucasian subjects, which places considerable limits on the generalizability of the findings.

Taken together, these fundamental methodological problems and concerns serve to constrain (and often add much confusion to) the conclusions/ generalizations that can be made based on previous research. To the extent that future researchers are successful in controlling for the diverse factors believed to influence grief, the more accurate our knowledge base will become.

Clinical consensus, as previously noted, predominantly seems to be that individuals who have been bereaved because of suicide undergo an especially distressing and difficult form of grief (e.g., Cain, 1972; Hauser, 1987). This long-believed assertion has not received anywhere near the amount of empirical support required to lay the issue to rest. Much literature points to the lack of differences in the bereavement process that are attributable to mode of death. In fact, however, it can reasonably be asserted that depending upon the lens through which one critically analyses published survivor literature, an argument

could be made either to support or refute the assertion that specific manifestations of grief resulting from suicide are inherently more frequent and painful than grief resulting from other modes of death.

Several literature reviews have been published (e.g., Farberow, 1991; Hauser, 1987; Ness & Pfeffer, 1990) with the goal of providing a relatively concise explanation of the conclusions that can be drawn based on the studies that were reviewed therein. One such review, previously mentioned above, was that of Calhoun et al. (1982). In this review, three cautious generalizations were put forth regarding findings which appeared to the authors to be quite consistent across studies (as derived from literature that was in the form of either clinical observations or case studies). Suicide survivors, more often than those grieving other modes of death, tended to experience (1) less social support, (2) greater guilt, and (3) a greater need to search for an understanding of the antecedent causes that may have caused the death. Interestingly, given that not a single comparison group study was included in this review (only one study, that by Stone, 1972, was potentially available), the conclusions made (even though acknowledged by the authors as tentative) typify the unfortunate practice of suggesting differences between groups where little, if any, empirical justification exists upon which to make such statements.

As research has accumulated over the past two decades, recently written reviews predominantly indicate that there are far more similarities than differences between survivors grieving different modes of death. One such

report, a thorough review by Van der Wal (1989) concluded that the grief process of suicide survivors appears to display the same course and main features as that occurring after other modes of death. Based on her analysis of the empirical literature it was noted that current evidence does not support the notion that survivors of suicide show more pathological reactions and a more prolonged and complicated grief process than do other survivor groups.

Literature reviews such as these are valuable in that they aid readers in acquiring a degree of order and clarity with regard to the expansive literature base upon which they are founded. However, problems do exist with such reviews and some of these will be briefly outlined with the intent of serving as a caveat regarding the utilization of these reviews when attempting to gain a detailed understanding of the field. Leaning heavily on McIntosh (1993), reviews such as those mentioned above have often, (a) tended to mix research findings with information based on anecdotal evidence, (b) are often not complete in their coverage, (c) are largely uncritical of the methodology employed by the studies reviewed, and (d) often fail to delineate findings based on comparison versus noncomparison group designs. Reviews are valuable, but one must certainly dig deeper into the literature in order to more fully and accurately understand the current state of affairs within the field. It is felt by the present author that an analysis of published literature, one report at a time, based on the conceptual delineation of this literature as presented below is a fruitful approach, one which allows for a more thorough understanding of suicide survivors to emerge.

As has been implied, empirical literature examining the nature of grief reactions in suicide bereavement varies widely in both the quality of its execution and in the generalizability of the results that are obtained. The published body of suicide survivorship literature can be conceptually separated into three spheres, or domains, each representing a particular style of reporting or methodological approach. This self-imposed conceptual differentiation serves perhaps the dual purpose of allowing for (1) a clearer perception of the emergence of the divergent strands that presently exist within the field as well as (2) a means of achieving a heightened clarity regarding this complex and wide-ranging literature base.

The three realms or divisions within the suicide survivorship literature can be classified as follows: (1) those reports not based on systematic empirical methodology (e.g., anecdotal, auto-biographical/ experiential, or clinical case reports), (2) descriptive empirical studies which assess a group of suicide survivors and their reactions to the loss in the absence of comparison groups (i.e., noncomparison group designs), and (3) empirical investigations utilizing comparison groups. The three "domains" listed above all provide valuable knowledge (albeit in a different manner) about the situation of the suicide survivor. However, it will be shown that if the question of interest revolves around an exploration of the *differential impact* that mode of death has on survivors, empirical investigations utilizing appropriate comparison groups yield the greatest potential (in comparison with the other styles of reporting) for the

painting of a more refined and exacting picture. Without a comparative basis for analysing results, statements regarding the issue of the *relative* impact of mode of death on subsequent functioning can *not* be verified with techniques of inferential statistics.

1. Case Studies

Published research examining suicide survivors is, to a great extent, either experiential, anecdotal, or in the form of clinical case reports. Some of these reports are autobiographical in nature, produced by individuals who have themselves survived the suicide of a loved one. These personal written accounts of the painful experiences that they have undergone serve well to provide the reader with a "feel" for the struggles that the suicide survivor may encounter.

Autobiographical accounts are perhaps the most authentic statements available of the tormenting experience of losing a loved one through suicide. Bolton (1987) writes of the multiple reactions that she went through after learning that her 20 year old son had died from a self-inflicted gunshot wound. Of the many reactions she reported, the most prominent were: feeling abandoned and rejected by her son, confusion, anger, embarrassment, a feeling of stigma, depression, and thoughts of suicide. "There was an impact on my spirit and upon my very being which is difficult to describe. I knew that Mitch's suicide had touched my soul so as to alter it forever" (p. 88). This quote shows how hard it is for a survivor to find words that describe the impact on him or her

of the suicide. Bolton goes on, with a strikingly deft analogy, to describe both the suicide itself and the plight of the survivors:

> I often compare the act of suicide to that of a stone tossed into a pond. The splash may be large or small. It always sends ripples in every direction, in a concentric washing of every floating leaf, twig, and waterbug. The stone sinks out of sight, but its impact is felt by the widening ripples which touch distant, unfamiliar territory. We are startled, tossed about: without control, we hang on and ride the dizzying waves. If we choose not to stay afloat, we too may sink. (p. 90).

It is moving personal accounts such as this (see also Alexander, 1987; Chance, 1992; Hebert, 1987; Pesaresi, 1987) that impress upon the reader the tremendous toll that suicide exacts upon those who were intimately in contact with the deceased. The painful emotion and suffering are both very real and apparent in these reports.

An anecdotal report by Alexander (1991) noted that normal grief issues may be intensified by the nature of the suicidal act and the stigma surrounding it. She stated that the "secrecy, isolation, and disconnection that frame the act of suicide become the survivors' legacy, making their grief especially difficult and complex" (p. 277). Further, she noted that suicide survivors often react with denial, self-blame, guilt, anger, and a tendency to blame others.

Buksbazen's (1976) powerful case study of a woman whose older brother had killed himself describes the survivor's sense of shame, guilt feelings, feelings of

being rejected by the deceased, and continual questioning of why it happened. Buksbazen touched on issues of personal responsibility in the occurrence of the suicide, noting that "...survivors tend to overemphasize small omissions they may have made to the suicide. They will analyze the days before the death for clues of their responsibility in not saving the person" (p. 199).

Silence regarding the circumstances of death is also poignantly noted by this survivor, who revealed that, "No one talks about how he died, no one ... I've never heard anyone except my brother, Tom, talk about it. But I've never heard anyone else actually get in touch with it" (p. 111). This tendency toward silence and lack of communication and acknowledgement regarding the fact of suicide has been widely noted within the literature, with this shroud of silence serving to constrain and inhibit an open flow of conversation between and among those who are trying to assimilate the reality of the manner of death. Importantly, this lack of communication likely places an added strain upon suicide survivors, as this type of response (or, more correctly stated, lack of verbalized response about the death) is not commonly noted as a part of the mourning process after other causes of death. This silence likely accounts for some of the difficulties experienced by survivors in trying to understand and adapt to their loss.

Another enlightening clinical case report is that of Schuyler (1973). Schuyler said that in the process of mourning a suicidal death, quite frequently there is "incomplete mourning due to the preoccupation with the *suicidal* nature of the death to the exclusion of dealing with the *loss* that has been incurred" (p. 316).

One of the most predominant of the multitude of reactions ascribed to the suicidal death of a loved one emerging from autobiographical and clinical reports of survivors is the painful process of searching for answers. A suicidal death raises many questions. Survivors search for answers in an attempt to make sense of the reality of the tragedy (and thus allow for an acceptance to emerge). This questioning behavior consumes a great proportion of the survivor's time and energy. Chance (1988), speaks of the process of surviving a suicide as "a journey to resolution." This journey requires that answers be sought. She notes that it is "characteristically human to look for meaning, yet examining a completed suicide for meaning is a painfully bewildering enterprise" (p. 32). Answers are sought, but the only person capable of assembling the pieces to the puzzle is the deceased. Alexander (1991) speaks of "asking all the questions that the act leaves unanswered" (p. 291). To close this section, Anderson's (1968) statement that "...death ends a life, but it does not end a relationship, which struggles on in the survivor's mind, toward some final resolution which it may never find" (p. 30). Those words serve well to capture, with a striking clarity, the conundrum left for the survivor to deal with.

This realm of literature concerning suicide survivors does much to convince even the skeptical reader that grief after a suicide is an especially distressing experience. However, while in no way wishing to denigrate the tremendous value of these personal accounts which have added significantly to our empathic understanding and knowledge base about survivors, one must be wary of

proclaiming that suicide survivorship is a more severe/qualitatively different experience than the resultant bereavement process that accrues from other modes of death based solely on this style of literature. Limitations of such reporting, such as limited representativeness of survivors and thus generalizability concerns, make a reliance on these findings of these reports inherently problematic. Nonetheless, the overriding impression created by these reports is that suicide, as the mode of death being grieved, does indeed precipitate a wide array of very intense grief reactions. As well, from a slightly different perspective, these reports provide hints that the experience of bereavement following suicide may in some ways be a qualitatively different experience than that faced by those mourners for whom suicide was not the cause of death.

2. Noncomparison Designs

Empirical investigations of samples of survivors compose the second and third realms as discussed above. It is practical and quite useful, as has been noted above, to be clear about those results based on studies that do not utilize comparison groups as opposed to results derived from comparison group studies. Keeping this distinction in mind, the second realm of literature within the field seeks to describe the bereavement experiences of suicide survivors. This body of information is informative, but is limited in the extent to which it allows for an illumination of the possibility of any differential impact (either in terms of severity or in terms of qualitative differences) that can be attributed to

the mode of death. This of course is the unfortunate result of a method that does not involve using comparison groups.

Reports that assess suicide survivors but do not make use of comparison groups have indicated that the grief experienced by suicide survivors may indeed be qualitatively different from that of other survivors, or intensified, because the deceased killed himself/herself. Van Dongen (1990) interviewed 35 survivors three to nine months (mean of 5.8 months) after the loss of a loved one through suicide. She found that all 35 survivors engaged in what she called "agonizing questioning." Van Dongen took this repetitive and persistent questioning of many things related to the suicide to represent a method of coping with the loss. Notably, the severity of the questioning behavior (and thus its' relative impact on functioning) varied according to survivors' perceptions of the deceased prior to the commission of the suicide. Those survivors who viewed the death as not preventable and who in fact expected the deceased to die through suicide (as opposed to those who perceived the death as having been preventable) experienced less painful bereavements. The author concluded that the persistence of "agonizing questioning" interfered with a healthy accomplishment of the necessary grief work that is required for an adaptive response to the loss.

Wrobleski and McIntosh (1987) obtained data from 159 suicide survivors in an exploratory study of suicide bereavement. They found that a significant proportion (42%) of the bereaved persons felt relief, although many of them

reported feeling guilt (86%) and anger (84%). Those who felt more anger felt more guilt. As well, 67% of survivors reported problems of seeing and dealing with the death scene in their mind; and they fairly often (44%) reported thoughts of committing suicide. The authors concluded that their results supported the proposition that, as a group, suicide survivors have special problems to deal with. Among these problems are separation and isolation both out of and within the family setting, ignorance of the reason for the death, difficulties in the reconstruction of events leading up to the death, and fears of their own individual susceptibility and their family's subsequent susceptibility to suicide and mental illness.

Finally, some respondents (14%) indicated that they were not truthful to others when disclosing the mode of death, preferring either to lie or to tell others nothing. According to the authors, this finding likely represents a unique aspect of suicide bereavement, as it is difficult to visualize survivors of persons who died by other means lying to others about the way in which the deceased died (although it is likely that deaths attributed to one other stigmatizing circumstance, AIDS, may also lead the bereaved persons to respond in a like manner).

Another study, by Hiegel and Hipple (1990), noted that suicide survivors suffer the same feelings of anger, pain, guilt, and sadness as other mourners do but that these feelings may be more intense and may last for years. Also, suicide survivors were reported to be more likely to be depressed and to use

tranquilizers than were other mourners, and were also more likely to commit suicide themselves.

Finally, a very interesting study was conducted utilizing structured interviews to analyze the impressions of funeral directors regarding the nature of the pain inflicted upon relatives when suicide was the mode of death (Calhoun, Selby, and Steelman, 1988). Since funeral directors are intimately involved with the families of the deceased, the findings of this study are illuminating and tend to support the widely held dual notions of intensified reactions and qualitative differences. The funeral directors indicated that they believed that suicide produces different reactions within the family. Specifically, suicide was seen as producing more shame and embarrassment, greater difficulty in coping with the death, and a greater likelihood of the presence of guilt feelings and unanswered questions about the death in the surviving family.

3. Comparison Group Designs

The above mentioned studies that did not have comparison groups paint a picture of suicide survivorship that is largely at variance with the overall picture as generated by published studies employing comparison groups (the third realm of literature). As previously noted, comparison groups have not been utilized very widely in grief research concerning suicide survivors. An analysis of the few studies to explicitly compare grief reactions among survivors grieving differing modes of death yields several interesting findings; results that, when taken on the whole, tend to contradict the popular "intensified reactions" belief

espoused by the authors of the studies we have just reviewed. However, there are indeed findings embedded within these types of studies that do lend empirical support for the existence of grief reactions that are of a greater intensity, as well as for the existence of qualitative differences, in the resultant grief of those mourning different modes of death.

McIntosh (1993) reviewed and critiqued only those few (14) empirical publications that utilized comparison groups. Based on his review he made four generalizations. First, when comparing survivors according to mode of death, many more similarities than differences emerge, and that this is especially the case when comparing suicide survivors with survivors from other sudden modes of death (i.e., accidents). Second, there may be a relatively small number of grief reactions (aspects of grieving) that may differ for suicide survivors, but that, as has been indicated in this paper, the precise differences are not yet entirely clear or consistent. Third, the *course* of suicide survivorship may indeed differ, over time, from that of other survivors (pointing to the need for longitudinal comparison group studies). Finally, by some time after the second year of bereavement, differences in grief seemed minimal, if not indistinguishable, when comparing across survivor groups. By focusing only on comparison group designs, McIntosh has implicitly defined the preferred direction to be followed by investigators conducting subsequent research in this area. In the following section, an overview will be presented of those studies which are of the most relevance to the current research project.

Three recent studies, all employing retrospective designs, have been carried out utilizing samples of college students. Range and Niss (1990) focused on the possible long-term consequences of bereavement due to either suicide, homicide, accident, anticipated natural, or unanticipated natural deaths. Respondents were limited to those who had experienced a death at least two years prior to the investigation (range from 2.25 to 12.75 years, mean = 5.75). Several standardized instruments were used to assess reactions, with results indicating a great degree of similarity among the groups. The only significant difference was that, when compared with both of the natural death groups (anticipated and unanticipated), accident survivors reported a stronger feeling that the death did not "feel real" to them. The authors concluded that their results suggested that long-term bereavement is a similar experience, regardless of the mode of death involved. Unfortunately, the sample size of this study was relatively small (N=68), and, as is the case with all three college sample studies, no non-bereaved controls were assessed.

Range and Calhoun (1990) compared the same five survivor groups as did the preceding study, but their sample (N=57) differed in that it was restricted to individuals who had been bereaved within the last year. These authors utilized a structured, nonstandardized interview focused primarily on interpersonal aspects of bereavement. Results indicated some differences between the groups. Both suicide and accident survivors reported significantly more often than the natural death groups that they were pressured by other people to

explain the cause of death. Suicide survivors were the only group to report that they had lied to others regarding the true cause of death (44% lied). The authors attribute much significance to this finding in terms of how it may subsequently affect the bereavement process in these individuals. They state that regardless of the reason for lying, "the resulting guilt and interpersonal distance from others adds to the burdens they experience during the bereavement process" (p. 318). Even though those bereaved because of suicide did share a common core of experiences with individuals bereaved from other modes of death, the authors concluded that bereavement following suicide is a more difficult crisis to cope with than is bereavement by other modes of death.

Most recently, McIntosh and Kelly (1992) studied family members and close friends (N=174) who identified themselves as survivors of either a suicide, an accident, or a natural death. The mean time that had elapsed since the death was 5.9 years, with this time period ranging from as recent as less than one year to as long as 34 years. Respondents were assessed using both standardized instruments and individual questions that were designed by the authors to tap reactions not assessed in the standardized instruments. Even though results indicated an overall similarity between the groups, some differences did emerge. Among these were that both suicide and accidental death survivors, when compared with the natural death survivors, reported (a) greater shock, (b) a greater degree of stigma, (c) a greater need to understand the death of their

loved one, (d) that someone felt that they were to blame for the death, and (e) experiencing an "anniversary reaction" (i.e., getting upset each year near the date of the death).

Suicide survivors differed from the other two groups in a number of ways. First, they more frequently reported feeling that they could have done something to prevent the death. Second, they blamed more people and groups for the death, and third, they more often indicated that some family member was blamed for the death. The authors conclude that little evidence was found to indicate that suicide survivorship is inherently more devastating or a different type of grief experience than that resulting from other modes of death. On the contrary, their results provide evidence that certain of the reactions to a suicidal death are in fact different.

It is useful to consider the possibility that between group differences were not found to a greater degree because of the way in which the researchers asked their questions. There are a couple of immediate concerns that warrant careful consideration here. The first concern is that many of the key constructs which have been theorized to differentiate suicide bereavement (e.g., guilt, embarrassment, shame, stigma, etc.) were assessed with only a single question of the authors design. Further, and of greater concern, is that the respondents were asked to indicate the extent to which they experienced these particular reactions *immediately after the death*. In light of the large body of empirical evidence (e.g., Glick et al., 1974) which documents that the time period

immediately after the death is typically characterized as one of shock, numbness, and disbelief for the newly bereaved, it is reasonable to posit that many of the manifestations of grief would not occur until after this initial phase had run its course. It is also accepted knowledge that the bereavement process is unique for every given mourner, and so, again, perhaps some grief reactions (e.g., shame, guilt, isolation from others) did not emerge until later in the bereavement process, perhaps months or even years after the death for some of the bereaved. By restricting the analysis and comparison of grief reactions to the time immediately after the death, the authors have systematically discounted by far the greatest proportion of the bereavement experience of this sample of bereaved individuals. It is thus important to view their conclusions, which assert an overall similarity between the bereavement groups and tend to smooth over the differences that do exist, with caution.

In all of the above-mentioned college sample studies, friends and family survivors of the deceased were combined. Previously, it has been noted that research should, to the extent that it is possible, attempt to control for the relationship between the respondent and the deceased. Of relevance, McIntosh and Kelly (1992) analyzed their data further by comparing family versus non-family (friends and non-immediate family) survivors within their sample. The overwhelming majority of comparisons made did not differ significantly between the groups. However, differences were found in that immediate family survivors rated their emotional closeness to the deceased as closer (not a surprising

result), experienced much greater embarrassment, and more frequently spoke with support groups or counsellors. These results underlie the potential importance of both relationship category and felt closeness to the deceased.

One of the more well designed retrospective studies compared the grief experiences of 57 spousal survivors after either a suicide (n=14), accidental death (AD; n=15), anticipated natural death (AND; n=15), or unanticipated natural death (UND; n=13), and found results that tend to support and substantiate clinical wisdom (Barrett & Scott, 1990). This non-clinical sample of survivors was obtained from newspaper obituaries and assessed using the Grief Experience Questionnaire (GEQ; Barrett & Scott, 1989) at a period between two to four years after the death. Results indicated that suicide survivors (SS) reported significantly higher occurrences of several specific grief reactions. Compared only with AND survivors, SS reported a greater frequency of feelings of responsibility for the death, stigmatization, and search for explanation. Compared with both AND and UND survivors, SS reported both a greater feeling of shame (embarrassment regarding the cause, nature, or circumstances of the death) and a greater total grief reaction scale score (a cumulative summary of all scale items). Finally, SS scored significantly higher than all other survivors in terms of feeling rejected by the deceased and on the unique reactions subscale (which measures experiences that intuitively appear to be inherently unique to survivorship of a suicidal death).

Further analysis of the individual scale items revealed that SS were clearly

differentiated from all other survivors in their responses to eight items. These were (a) feeling uncomfortable revealing the cause of death, (b) feeling embarrassed, (c) feeling like the spouse chose to leave them, (d) feeling like the spouse never considered what the death might do to them, (e) feeling that the spouse's death was a rejection, (e) wondering about the spouse's motivation for not living longer, (f) feeling that the spouse was somehow getting even by dying, and (g) telling someone that the cause of death was something other than what it was. Thus, the results of this comparative study indicate that suicide survivors, as a group, can indeed be characterized as being involved in a bereavement process that is in some ways qualitatively different (i.e., in terms of the reported frequency of occurrence of various facets) than that experienced by the survivors of other modes of death.

From this review, it becomes apparent that a clear consensus has not been reached on the nature of the possible differences in grief reactions among survivors of different modes of death. It is readily apparent that most of the more thoughtfully conducted studies and reviews suggest that the bereavement experience has many aspects in common regardless of the mode of death being grieved. However, differences do present with enough regularity to allow one to assert that intricate, perhaps even very subtle, distinctions do exist, both in terms of the potentially unique occurrence of specific manifestations (e.g., feelings of stigmatization and embarrassment; denial of the mode of death, etc.), and in terms of the frequency/intensity of specific grief reactions (e.g. guilt,

anger, intense questioning behavior, etc.).

Purpose of Study

Given the above noted considerations, the purpose of the present study was to refine our understanding as to the nature of component aspects of grief as manifested in survivors of suicide as compared directly with survivors of either accidental deaths, anticipated natural deaths, or unanticipated natural deaths (or combinations of these). The utilization of comparison groups in this study provided two principal advantages. First, it allowed for direct and meaningful comparisons to be made across the groups of survivors on particular dimensions of grief. Second, the accidental and unanticipated natural death survivor groups, in addition to the suicide group, allowed for the assessment of the surprise, or lack of anticipation factor and its influence on grief reactions. Third, the two natural death conditions allowed for the influence of the "naturalness" of the death to be systematically examined by comparing the composite of these two conditions against the unnatural deaths due to suicide and/or accident.

The analysis of the grief experiences of survivors was attained through the usage of several standardized measures. The use of such instruments with known psychometric properties is crucial in that it allows for a more reliable assessment to be made of the measured reactions. An extensive examination of bereaved participants' self-reported (subjectively defined) grief reactions, as experienced in response to a particular death, is called for both as a function of the practical importance of refining our understanding of the components of

suicide survivorship, as well as by the general incompatibility of current suicide survivor research findings. It is likely the case that past research which has attempted to assess differentiation according to mode of death has focused too intensely on broader measures of functioning (i.e., depression, anxiety, obsessive-compulsiveness, etc.) to the exclusion of a consideration of what may be viewed as more narrow and circumscribed reactions. Common sense suggests that it is important to be aware of even subtle differences that may exist among those who grieve from varying modes of death. It was in the hope and expectation of furthering the understanding of the characteristic reactions of survivors of suicide and how these may differ from that of those who mourn other types of death that this research project was undertaken.

Given this background, it is hypothesized that many of the assessed potential reactions to bereavement will be shared among the groups in terms of influence, but that certain of the more circumscribed reactions of the GEQ will differentiate the modes of death under study. Given the variant findings reported in previously conducted literature, it was difficult to specify in advance exactly where these differences would occur, although the following provide a flavour for the expectations of the author: (1) The GEQ subscales of search for explanation, loss of social support, stigmatization, guilt, responsibility, shame, rejection, and unique reactions will be retrospectively rated as having occurred more frequently in the experience of suicide survivors compared with survivors of other modes of death, (2) that the global measures of reactions to bereavement (i.e., TRIG Past

Behavior and Present Feelings subscales, IES Intrusions and Avoidance scales, and the GEQ total scale score) will not be evidenced to differ significantly across the groups, and (3) that given previous findings indicating that deaths that occur suddenly, with little or no forewarning or opportunity for anticipation produced more disruption in subsequent functioning (Glick et al., 1974), differences between the composites of the anticipated and unanticipated conditions should be present - specifically on the GEQ subscale of Search for Explanation. In general, differences should be maximal between the suicide survivors and all other groups given the hypothesized uniqueness of suicide in the evocation of accentuated grief reactions.

CHAPTER II

METHOD

Respondents

The sample consisted of 350 students (253 females accounting for 73.8% and 90 males accounting for 26.2%) enrolled in introductory psychology classes at the University of Windsor who volunteered to participate in exchange for course credit. Written informed consent was obtained from all participants.

The mean age of the sample was 20.75 years (SD = 4.83; range = 18 - 64 years), and was comprised predominantly of Caucasian individuals (87.9%), with Afro-Canadians (4.4%), Orientals (4.4%), and Latin Americans (0.6%) composing the remainder of the sample. Ninety-three percent were single, 4% were married, and 2.6% were divorced or widowed. Approximately half the subjects identified their religious affiliation as Catholic (48.9%), while 27.4% were Protestant. No other religious affiliation was endorsed by more than 1.2% of the respondents.

An additional 34 participants completed the questionnaire but were excluded from further analysis. Twenty were excluded because respondents indicated that they were less than nine years of age at the time of death (less than the minimum age of inclusion). Nine more were excluded because the cause of death (six homicides and three deaths due to AIDS) fell outside the scope of the present investigation. While AIDS is a death due to "natural" causes, it was felt that survivors of an AIDS related death may themselves compose a distinct

group warranting analysis. Unfortunately, the small number in this sample precluded their separation and analysis as a distinct group. Four more were excluded because a natural death survivor failed to indicate whether or not they had anticipated the death, and one was excluded as the mode of death was not given.

Measures

Grief Experience Questionnaire (GEQ; Barrett and Scott, 1989). The GEQ was designed to measure various components of grief, especially those conceptually associated with, and perhaps different for, suicide bereavement. Item selection was based on the deductive (rational) approach of scale construction, with items derived primarily from statements of suicide survivors as described in previously published literature. The instrument contains 55 questions designed to assess 11 dimensions of grief (5 questions per dimension). Respondents answer the questions on a 5-point Likert-type scale ranging from "Never" (scored as 1) to "Almost always" (scored as 5). Responses to items within a scale are summed, and with higher scale scores, the greater is the likelihood that the particular reaction has been experienced. These scales (or components/dimensions of grief), are (1) Somatic reactions, (2) General grief reactions, (3) Search for explanation, (4) Loss of social support, (5) Stigmatization, (6) Guilt, (7) Responsibility, (8) Shame, (9) Rejection, (10) Self-destructive behavior, and (11) "Unique" reactions. A GEQ total score is derived by summing the responses to all 55 items of the inventory. Reported

scale alpha coefficients are moderately high to high, ranging from a low of .68 to a high of .89, with the Total GEQ alpha equalling .97 (Barrett and Scott, 1989). A major advantage of the GEQ is that it addresses a methodological flaw noted in prior research, this being the lack of explicitly stated operational definitions of the grief reactions being measured.

Impact of Event Scale (IES: Horowitz, Wilner, & Alvarez, 1979). The IES is a 15 item self-report measure designed to assess the current degree of subjective distress related to any given life event. In this study, the life event was the death of a relative or acquaintance. All items are stated in the form of comments which describe potential responses to the particular life event. The respondent is asked to indicate, for each comment, how frequently it was true during the past seven days (including the day of their participation). Scoring categories are "Not at All" (scored as 0); "Rarely" (scored as 1); "Sometimes" (scored as 3); and "Often" (scored as 5).

Two subscales are derived from the measure. Intrusions (IES-I) contain seven questions, assessing the degree to which the respondent experiences unwanted intrusions into consciousness of thoughts, images, and feelings related to the death (potential range of 0 to 35). The other subscale, Avoidance (IES-A) contains eight questions measuring the frequency with which the respondent exhibited evasiveness of either an emotional, behavioral, or cognitive nature with regard to the death (range from 0 to 40).

Internal consistency of the scales is high, with Horowitz et al. (1979) reporting alpha values of .78 (Intrusion) and .82 (Avoidance). In a cross-validation study utilizing three distinct groupings of subjects (Zilberg, Weiss, & Horowitz, 1982), alpha values ranged from .79 to .92 for the Intrusion scale, and from .82 to .91 for the Avoidance subscale. Further, Cleiren (1993), in a longitudinal study, reported alpha values of .79 and .73 (for Intrusion and Avoidance subscales respectively) at a four month post-death interval, while at the 14 month repeated measure, reported values were .84 and .74, respectively.

Texas Revised Inventory of Grief (TRIG; Faschingbauer, 1981). The TRIG is a two scale Likert-type measure revised from the original Texas Inventory of Grief (Faschingbauer, DeVaul, & Zisook, 1977). In the initial section, respondents provide demographic data and information regarding circumstances surrounding the death. The next section contains the first subscale, Past Behavior, which consists of eight questions relating to the period of time immediately after the death. The other scale (Present Feelings) has 13 questions which relate to present feelings in response to the death. Respondents are asked to indicate the truth of the 21 statements for them on a scale ranging from "completely true" (scored as 5) to "completely false" (scored as 1). Each part is scored separately, with potential ranges of 8 to 40 for Past Behavior and 13 to 65 for Present Feelings. Higher scores indicate more difficulty in handling the grief experience. Faschingbauer (1981) reported that construct validity was assessed and supported by hypothesis testing and cited

an alpha coefficient of .81 for Part I and .88 for Part II. The instrument ends with five additional true-false questions regarding facts related to the respondent's grief experience and a blank space for subjective comments (that can be utilized as qualitative data).

Respondents also completed an eight page questionnaire constructed by the researcher to tap aspects of their bereavement experience that were not assessed by the standardized instruments noted above. This questionnaire is reproduced in Appendix A.

Procedure

Respondents for this study were recruited from introductory psychology classes by their respective teaching assistants. Students were informed that they were being invited to volunteer to participate in a research project examining bereavement and grief, and that by participating, they would earn one bonus point to be applied toward their final grade in the course. The only inclusion criteria was that participants had to have been bereaved at some point in their lives. A sign-up booklet containing prearranged times and locations for group administrations was then circulated throughout the classroom, within which eligible and willing students signed up to participate in any one of the numerous data gathering sessions offered.

In each of the data gathering sessions, participants were initially informed that (as already stated to them during their initial sign-up) the study was open only to those who had been bereaved at some point in their lives. The potential

respondents were then instructed to fill out the questionnaire package with reference to *one* particular deceased individual. Due to the ubiquity of death, many of the respondents had undoubtedly known several people who have died. In such cases, the respondents were instructed to report their experiences accruing from the death of the individual who they feel they were closest to. This guideline was tempered with one special instruction. If a respondent had experienced the death of more than one individual who they were close to, they were asked to choose a death based on the following guidelines: (a) if one of the deaths was a suicide, they were asked to respond with reference to that death, (b) if they had not lost someone to suicide, but had lost someone through an accident, then they were to report on that death, and (c) in cases where all of the deaths had been due to natural causes, then the respondent would choose the person to whom they were closest. The rationale for this system of selection lies in the fact that base rate data indicate that suicide and accidental deaths are far more infrequent than are deaths due to a natural cause. Thus, in order to maximize the likelihood of obtaining an increased number of suicide and accidental death survivors (and thereby facilitate the conducting of group comparisons), the above guidelines were presented to the participants. No further formal instructions were given to the group, although the principal investigator did respond to numerous individual questions as the data gathering session continued.

Following these brief instructions, a consent form (see Appendix B) was

circulated which the respondents were instructed to read carefully and then sign if they still desired to participate. The questionnaire package was then distributed and the consent forms collected. Each session was scheduled for 50 minutes, but on several occasions participants required additional time. Since the rooms were always booked for an additional hour, these occurrences posed no difficulties. Upon completion of the materials, respondents recorded their name and student number on a separate participants list (so that the investigator could arrange that they received their experimental credit point) and were given a sheet containing some general information about grief and bereavement and a listing of bereavement resources available to them within the community (Appendix C).

Ethical Issues

Ethical issues and concerns regarding the execution of research on the grief experiences of bereaved subjects have been noted above. An anticipated risk in this study was the potential of evoking some of the painful memories and emotions that were associated with the remembrance of the deceased. In an attempt to lessen this risk, all subjects were informed in the consent form about the purpose of the study and the possibility that some of the questions asked may evoke painful feelings. It was also felt that the personal distance and anonymity derived from the group administration of the self-administered questionnaires could serve to lessen the potential of evoking excessively painful responses in the participants. Range and Calhoun (1990), noted of their college

student sample that, "...even though sensitive issues were discussed, participants seemed to appreciate the opportunity to talk about their loss and frequently expressed gratitude to the interviewer" (p. 314). Even though the present investigation did not employ the method of individual interviews to collect the data of interest (a method which likely places the bereaved in a relatively more intense interpersonal situation), many respondents spoke candidly to the investigator about their grief experiences upon completion of the written materials. Many individuals thanked the investigator for the opportunity to further "work through" their feelings, and many spoke of the good feeling associated with the *remembrance* of the person who had died, even though the memories were oftentimes very painful.

As another safeguard to try to protect as much as possible against the excessive painful evocation of memories in the participants, the questionnaire was kept as brief as possible given the questions of interest to this study. This was done out of concern that a lengthy protocol may have increased the likelihood of negative reactions in some participants. In addition, as noted above, information was provided to each subject in the form of a list of resources available within the community that may be of assistance to them, including bereavement groups, should they have a desire to utilize them (see again Appendix C).

CHAPTER III

RESULTS

Given that many preliminary analyses were undertaken in advance of consideration of the main variables of interest to this study, the following outline points to the structure of the results as they are presented. Initial treatment will focus on the division of respondents into groups, followed by the presentation of demographic data. An analysis of group (mode of death) similarities and differences on these demographic variables, the relationships of the respondents to the decedents, and of the reported causes of death are then included. The next section examines the standardized measures (GEQ, TRIG, and IES) utilized in this study. Descriptive statistics, scale reliabilities (alpha), and intercorrelations among these outcome measures are then presented. Following these initial presentations, the major statistical procedures utilized are explained, with the results pertaining to mode of death effects followed by the consideration of trends indicated between covariates and group contrasts (at the outset, it should be mentioned that the criterion for statistical significance was set at $p<.001$, while $p<.05$ was considered to be indicative of "trends" in the data). Finally, the suicide survivors are considered in isolation in order to more fully describe the characteristics of this group, and in addition, to illuminate, in some detail, those factors and issues which influenced the nature of their grief.

Organization of the data

Initially, the participants were divided into four groups based on the mode of death they had experienced. Of the 350 participants, 259 survived deaths due

to natural causes, 57 due to accident (A), and 34 through suicide (S). Survivors of natural deaths were divided into anticipated and unanticipated conditions depending on their response to the following inquiry: "Did you anticipate, or have advance warning, that the person would soon die?" Based on this data, 157 participants were categorized as "anticipated natural death" (NA) survivors, while 102 fell into the "unanticipated natural death" (NU) condition.

Demographic data

The respondents had been bereaved an average of 4.1 years (SD = 4.06; range = 1 month to 29 years) prior to their participation in this study. Of the 350 reported deaths, 275 (78.8%) had occurred within the past five years, with 25.8% (90) of these occurring within the preceding 12 months (refer to Table 1 for a detailed breakdown of time since death). The mean age of the respondents at the time of death was 17.07 years (SD = 5.06; range = 9-53 years), and the mean age of the decedent was 51.7 years (SD = 25.15; range = 1-96 years).

Univariate analyses of variance of demographic variables indicated that the four survivor groups differed significantly on the mean age of the decedent, $F(3, 353) = 79.12$, $p<.001$. Scheffe tests indicated that decedents in the NA group ($M = 64.4$) were older than those in the NU, S, and A groups ($M = 56.7$, 32.8, and 23.0, respectively). In addition, NU decedents were significantly older than both the S and A groups. Age of deceased differences were not found between the suicide and accidental death groups. There were no significant differences among the survivor groups on the current age of the respondent, their age at the

Table 1

Frequency Breakdown of Time Since Death (n = 349)[a]

Time since death	Frequency	%	Cumulative %
< 3 months	20	5.7	5.7
3 - 6 months	37	10.6	16.3
6 - 9 months	14	4.0	20.3
9 - 12 months	19	5.4	25.8
1 - 2 years	71	20.3	46.1
2 - 5 years	114	32.7	78.8
5 - 10 years	62	17.8	96.6
10 - 20 years	9	2.6	99.1
> 20 years	3	0.9	100.0

[a]one respondent failed to indicate elapsed time since death.

time of death, or the amount of time that had elapsed since the death. Also, although no significant sex difference was found, females outnumbered males by at least a 2:1 ratio in each of the four survivor groups (reflecting the proportion of females to males in the sample), while the sex of the decedents showed the opposite pattern, with males outnumbering females across each mode of death.

Respondents also rated their degree of emotional closeness to the deceased on a scale where 1 was "Closer than any," 2 was "Closer than most," 3 was "About as close as most," 4 was "Not as close as most," and 5 was "Not very close at all." The overall mean for the sample on this scale was 2.64 (SD = .97), with significant group differences indicated, $F(3,362) = 5.67$, $p<.001$. Accidental death survivors (M = 3.0, SD = .91) rated themselves as being less close emotionally to the decedent than did the natural anticipated and natural unanticipated survivors (M = 2.57, SD = .90 and M = 2.44, SD = 1.01, respectively).

With regards to the relationship between the respondents and the decedents, 42 deceased individuals were immediate family members (12.1%), while 307 (87.9%) were non-immediate family members. As illustrated in Table 2, death of a parent accounted for 69% of the deceased who were immediate family members (fathers 38% and mothers 31%). In the non-immediate family categories, grandparents (47.6%) and friends (22.6%) predominated. As would be expected, grandparents composed the large majority of individuals dying from natural causes (61.6%), while friends accounted for the majority of accidental and suicidal deaths (64.5% and 44.1% respectively).

Table 2

Relationship of Respondents to Decedents across the Four Survivor Groups

	Mode of death				
Relationship category	Suicide	Accident	NA	NU	Total
Immediate family					
Father	3	0	9	4	16
Mother	0	2	7	4	13
Brother	0	5	0	3	8
Sister	0	0	0	1	1
Husband	0	1	1	0	2
Wife	0	0	0	0	0
Son	0	0	0	0	0
Daughter	0	0	0	2	2
Total immediate family					42
Non-immediate family					
Uncle	3	3	11	10	27
Aunt	2	0	7	4	13
Grandparent	4	2	103	57	166
Great Grandparent	7	4	6	5	22
Friend	15	40	12	12	79
Total non-immediate family					307
Totals	34	57	157	102	349[a]

Note. NA = natural anticipated; NU = natural unanticipated.

[a]one respondent failed to indicate his/her relationship to the deceased.

The actual causes of death, as reported by the respondents, were quite varied within each of the four survivor groups. Of the 32 suicides, nine were reported to have been caused by gunshot, seven by carbon monoxide poisoning, five each by hanging and drug overdose, with one jumping and one drowning. The method of death in the four remaining cases was not clarified by the respondents. In some cases, it appeared from the respondent's written description of how the death occurred that a death reportedly due to suicide may actually have been accidentally or even naturally caused. However, regardless of the true (and oftentimes unknowable) cause of death, it is likely that the ways in which grief manifests are influenced by the *perception* of the bereaved as to the nature and circumstances surrounding the death. For this reason, the respondents' report as to the mode of death of the deceased (i.e., suicide, accident, or natural) was respected and taken as such. The majority of accidental deaths were motor vehicle related (72%), while natural deaths were primarily due to either cancer or heart attack.

Standardized Instruments

With regard to the standardized measures employed, raw scores were calculated for the GEQ, IES, and TRIG on the basis of scoring procedures outlined by the authors of these instruments (Barrett & Scott, 1989; Zilberg, Weiss, & Horowitz, 1982; Faschingbauer, 1981). As is evident in the descriptive statistics presented in Table 3, the most frequently reported reactions on the GEQ were searching for answers and guilt (with means of 14.92 and 13.54, respectively), indicating that these reactions had occurred "sometimes" during

Table 3

Descriptive Statistics for Outcome Measures

Scale	*n*	Mean	SD	Range
GEQ subscales				
Search for Explanation	348	14.92	5.23	5 - 25
Guilt	347	13.54	5.32	5 - 25
General Grief Reactions	348	10.91	4.02	5 - 23
Shame	348	10.43	3.93	5 - 24
Physical Reactions	349	9.62	3.76	5 - 20
Loss of Social Support	348	8.89	3.89	5 - 23
"Unique" Reactions	347	8.63	3.27	5 - 20
Stigmatization	347	7.51	3.35	5 - 23
Self-Destructive Behavior	348	7.46	2.96	5 - 23
Responsibility	348	7.23	3.23	5 - 25
Rejection	348	7.14	3.57	5 - 25
Total score	348	106.18	28.99	57 - 212
IES subscales				
Avoidance	350	11.23	9.41	0 - 40
Intrusions	350	11.84	9.31	0 - 35
TRIG subscales				
Past Behavior	346	21.25	7.15	8 - 39
Present Feelings	344	40.72	10.98	13 - 64
Self ratings				
Acceptance	350	7.57	2.43	0 - 10
Recovery	350	7.95	2.07	1 - 10

Note. GEQ = Grief Experiences Questionnaire; IES = Impact of Event Scale; TRIG = Texas Revised Inventory of Grief.

their grief, while feelings of rejection (M = 7.14) and responsibility (M = 7.23) were reported to have occurred "never" to "rarely." On the IES, respondents reported relatively low levels of both avoidance behavior and intrusive symptomatology (i.e., dreams, thoughts) relating to the death.

Two further outcome variables, acceptance of the death and degree of perceived recovery were also measured and used in the group comparisons. Regarding acceptance of the death, the mean score was 7.57 on a scale which ranged from 0, indicating that the respondent had "not accepted it at all," to 10, indicating that they had "completely accepted it." The degree of perceived recovery from the death was assessed on a similar scale, where 0 ("have not recovered at all" and 10 ("completely recovered") were the extremes. On this measure, the mean for all respondents was 7.95, indicating that by and large these bereaved individuals felt that they had recovered from the loss experience to a relatively substantial degree.

Reliability of the scales was calculated using Cronbach's coefficient alpha. As can be seen in Table 4, alpha values for the GEQ subscales ranged from .56 (Unique reactions) to .85 (Guilt), with a total scale reliability of .94. In general, these coefficients are lower than those reported by the authors of this measure in their initial study utilizing it (Barrett & Scott, 1989). Reliabilities for the IES and the TRIG were moderately high to high, consistent with prior research.

Intercorrelations were also computed among the outcome variables (GEQ, IES, TRIG, acceptance, and recovery) used in the regression analyses comparing the four mode of death groups (see Table 5). Considering that

Table 4

Coefficient Alpha Values for the Grief Experiences Questionnaire (GEQ), Texas Revised Inventory of Grief (TRIG), and Impact of Event Scale (IES)

Scale	*n*	# of items	Alpha
GEQ subscales			
Physical Reactions	348	5	.78
General Grief Reactions	347	5	.67
Search for Explanation	348	5	.83
Loss of Social Support	348	5	.80
Stigmatization	349	5	.77
Guilt	348	5	.85
Responsibility	347	5	.75
Shame	347	5	.67
Rejection	348	5	.84
Self-Destructive Behavior	348	5	.74
"Unique" Reactions	348	5	.56
Total Score	348	55	.94
IES subscales			
Avoidance	350	8	.84
Intrusions	350	7	.88
TRIG subscales			
Past Behavior	346	8	.86
Present Feelings	344	13	.91

Table 5

Intercorrelation Matrix of Ranked Scale Scores on the Grief Experiences Questionnaire (GEQ), Impact of Event Scale (IES), Texas Revised Inventory of Grief (TRIG), and Self-Ratings of Acceptance and Recovery (N=350)

Scales	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.
1. GEQ Physical																	
2. GEQ General Grief	.50																
3. GEQ Search	.39	.52															
4. GEQ Social Support	.34	.48	.27														
5. GEQ Stigma	.34	.51	.38	.58													
6. GEQ Guilt	.38	.41	.33	.38	.40												
7. GEQ Responsibility	.34	.38	.27	.32	.43	.49											
8. GEQ Shame	.25	.50	.35	.41	.44	.35	.32										
9. GEQ Rejection	.26	.48	.40	.32	.46	.28	.46	.34									
10. GEQ Self-destructive	.40	.44	.38	.40	.41	.31	.37	.32	.32								
11. GEQ "Unique"	.19	.41	.55	.29	.43	.23	.36	.35	.45	.36							
12. GEQ Total	.61	.78	.71	.64	.69	.65	.58	.63	.60	.59	.61						
13. IES - Avoidance	.32	.43	.37	.32	.36	.35	.26	.38	.25	.29	.28	.51					
14. IES - Intrusions	.35	.45	.45	.27	.39	.27	.26	.30	.29	.31	.33	.52	.71				
15. TRIG - Past	.49	.62	.50	.41	.42	.33	.34	.34	.45	.42	.38	.64	.32	.41			
16. TRIG - Present	.43	.54	.59	.33	.42	.32	.25	.32	.38	.38	.35	.58	.40	.54	.67		
17. Acceptance	-.32	-.34	-.52	-.26	-.36	-.26	-.23	-.28	-.27	-.31	-.31	-.48	-.37	-.42	-.40	-.58	
18. Recovery	-.40	-.41	-.44	-.34	-.38	-.33	-.26	-.28	-.29	-.32	-.25	-.51	-.36	-.46	-.49	-.64	.75

Note. All correlations were significant at $p<.001$.

ranked data from these outcome measures was used in the subsequent regression analyses, the correlations presented in Table 5 are based on these rank transformations of the raw data. As presented and defined by Conover and Iman (1981), "Rank transformation procedures are ones in which the usual parametric procedure is applied to the ranks of the data instead of to the data themselves" (p. 124). In the present case, this was a necessary step as unequal variances in the different groups (as indicated on the residual plots) presented problems for the statistical analyses to be used. Table 6 presents the raw scale means and *variances* for each of the outcome variables to illustrate the nature of the highly unequal variances across the groups. Basically, the ranking procedure was such that for each of the 18 outcome variables, the entire set of observations was ranked from smallest to largest, with the smallest observation given rank 1, the second smallest rank 2, and so on, with average ranks assigned in the case of ties. Since each outcome variable was responded to by a maximum of 350 subjects, the range of possible rank scores is 1 to 350, per variable. For each *group* of survivors, a mean rank was then calculated, based on the average of the individual ranks within that particular group. It was these mean group ranks that formed the base upon which the group comparisons were conducted.

Further, according to Iman & Conover (1979), any regression method (including hierarchical, as in this investigation) may be applied to the ranks of the original observations. The utilization of the rank transformation approach

Table 6

Means and Variances for Outcome Variable Raw Scores Across Mode of Death Groups

	Mode of death							
	Suicide		Accident		NA		NU	
Scale	M	(SD^2)	M	(SD^2)	M	(SD^2)	M	(SD^2)
GEQ subscales								
Physical Reactions	9.9	(18.0)	9.7	(13.8)	9.6	(14.2)	9.6	(13.4)
General Grief Reactions	12.5	(21.2)	10.9	(18.3)	10.3	(13.0)	11.3	(17.0)
Search for Explanation	18.4	(18.8)	16.9	(16.0)	13.0	(25.5)	15.6	(27.4)
Loss of Social Support	9.7	(15.9)	9.2	(17.8)	8.5	(13.4)	9.1	(16.0)
Stigmatization	10.2	(24.2)	7.8	(9.8)	6.8	(7.8)	7.7	(10.0)
Guilt	13.6	(29.2)	12.4	(20.7)	13.6	(27.5)	14.1	(33.1)
Responsibility	9.4	(18.1)	6.3	(4.0)	6.9	(8.6)	7.5	(12.2)
Shame	13.4	(27.6)	10.4	(11.3)	9.9	(12.1)	10.3	(15.7)
Rejection	13.2	(34.5)	6.4	(4.7)	6.2	(5.3)	6.9	(7.8)
Self-Destructive Behavior	7.6	(7.3)	8.0	(9.0)	7.0	(7.0)	7.8	(11.4)
"Unique" Reactions	13.9	(10.9)	9.3	(4.6)	7.3	(6.0)	8.5	(9.1)
Total Score	131.8	(1254.1)	107	(600.2)	97.7	(738.1)	108.3	(355.2)
IES subscales								
Avoidance	14.0	(122.8)	10.1	(69.0)	9.9	(77.4)	13.2	(98.7)
Intrusions	14.8	(111.5)	12.5	(64.4)	10.9	(74.5)	13.4	(101.7)
TRIG subscales								
Past Behavior	23.8	(54.9)	22.2	(53.6)	19.9	(45.0)	21.9	(53.6)
Present Feelings	43.3	(101.5)	41.7	(141.2)	38.8	(107.5)	42.2	(129.0)
Self ratings								
Acceptance	7.1	(6.87)	7.3	(5.47)	8.1	(3.87)	7.0	(8.27)
Recovery	7.7	(4.46)	7.8	(4.68)	8.4	(2.68)	7.5	(6.10)

Note. NA = natural anticipated group; NU = natural unanticipated group; SD^2 = variance.

thus allowed for some degree of correction to be applied to the homogeneity of variance problems present in the raw data, allowing for the appropriate usage of multiple regression analysis to test the group contrasts.

Referring again to Table 5, all outcome variables were significantly intercorrelated ($p<.001$). This finding is consistent with the results of McIntosh, Arnett, and Thomas (1992), who found significant correlations between the scales of the TRIG and the GEQ. Two aspects of this result warrant consideration. First, although a substantial degree of intercorrelation among the scales was evident, the magnitude of these relationships was typically in the moderate range, suggesting that the separate scales *did* measure somewhat distinctive aspects of grief. If, on the other hand, the magnitudes of the interrelationships were high, it would have been difficult to view the scales as tapping "separate" aspects of grief as was done in the later analyses of this study. Further, the obtained pattern of correlations supports the original intention of utilizing these measures, that being that they were all to be reflective of the overarching construct of "grief." Secondly, as regards face validity, Barrett and Scott (1989) noted of the bereaved spouses who completed the GEQ that they were able to identify the underlying intent of many of the subscales. Thus, the subscales do appear to tap into the constructs that they are intended to measure. In all, the pattern of significant intercorrelations combined with the apparent face validity and adequate alpha levels indicated for most of the scales provides support for the contention that the utilization of these measures was

appropriate in terms of deriving information regarding how these bereaved individuals reacted to the death in question.

Major Analyses and Findings

In order to assess the influence of mode of death, the survivor groups were compared across each of the previously noted 18 outcome measures. Initially, a multivariate analysis of covariance (MANCOVA) was to be utilized to test for group differences. However, this statistical procedure was precluded from usage because, according to Tabachnick and Fidell (1989), it is not permissible to utilize a covariate in MANCOVA that is significantly related to the independent variable, which in our case was the mode of death. Analysis indicated that 3 of the 4 covariates to be utilized (age of deceased, closeness, and preventability) did differ significantly across the groups. Thus, MANCOVA could not be used without significantly violating the underlying assumptions of this procedure. The usage of a factorial MANOVA was then considered, although this was deemed an unsuitable method because it would require that the original scaling of the covariates could not be preserved.

Multiple regression analysis was chosen as the statistical technique to be applied in conducting the group comparisons. Keppel and Zedeck (1989) note that the multiple regression approach is "the preferred strategy for analyzing nonexperimental designs" (p. 29). This recommendation suits the quasi-experimental design of the present study (as subjects were not assigned randomly to groups as required for a design to be strictly labelled as

"experimental"). Further, and of considerable importance to the present study, this strategy lends itself nicely to controlling for the influence of factors that are likely to confound the interpretation of mode of death effects. This can be done through the hierarchical entry of these potentially confounding variables (the covariates) into the regression equation as an initial block before mode of death is entered.

The choice of which covariate(s) to include was based on a desire to control for factors that seemed conceptually to be of considerable importance in influencing grief. As noted above, the age of the deceased and the closeness between the respondent and the deceased differed significantly across the mode of death groups, and were chosen as covariates on that basis, in addition to their conceptual relevance. Respondent's views regarding the preventability of the death also differed significantly across the groups, χ^2 (3, N = 346) = 60.30, $p<.001$, and hence this variable was chosen as a covariate. Finally, although the time since the death did not differ significantly across the groups, it was chosen as a covariate because of the conceptual significance devoted to this factor in the grief literature as well as because of its' correlation with many of the outcome variables. Thus, these four covariates were used in the regression equations to allow for the influence of mode of death to be examined with the effects of these confounding variables removed.

Ideally, as noted by Tabachnick and Fidell (1989), covariates should be significantly related to the outcome variables, and not significantly

intercorrelated among themselves. As shown in Table 7, the covariates were significantly related to the outcome variables in 52 out of the 72 computed correlations. In considering the influence of the chosen covariates, it is noteworthy that the age of the deceased seems most highly related to grief, followed closely by the belief that the death was somehow preventable. In only 2 of the 18 cases was preventability *not* significantly related to the outcome variables. Least related to the outcome measures was the time elapsed since the death. Further, as illustrated in Table 8, only one significant correlation was observed between the covariates, that being a negative relationship between the perceived preventability of the death and the age of the deceased. All remaining intercorrelations did not approach statistical significance. It thus appears that the covariates chosen for inclusion into the regression equations were appropriate.

Regression equations were then computed (one for each of the 18 outcome variables). In the conceptualization of the author, these outcome variables are not *causally* interrelated, but are rather causally affected by the perceived mode of death. In such a case, the running of multiple equations is statistically defensible and appropriate. Variables were entered as blocks into the regression equations. The first block contained the four covariates. These variables were entered first so that the variance in the outcome variables accounted for by them could be statistically removed, allowing for the subsequent evaluation of mode of death effects, which were assessed using

Table 7

Correlation Matrix of Covariates with Outcome Variables

	Covariate			
Outcome Variables[a]	Closeness[b]	Age of deceased	Time since death	Preventable
GEQ Subscales				
Physical Reactions	.23***	.11*	.20***	.13*
General Grief Reactions	-.20***	-.22***	-.10	.17**
Search for Explanation	.12*	.49***	.13*	.37***
Loss of Social Support	-.15**	-.10	-.08	.05
Stigmatization	.10	.23***	.03	.16**
Guilt	-.06	-.01	-.21***	.05
Responsibility	.12*	.06	.01	.21***
Shame	-.05	-.19***	-.13*	.14**
Rejection	-.16**	-.22***	.04	.15**
Self-Destructive Behavior	-.13*	-.26***	-.10	.11*
"Unique" Reactions	.03	.43***	.02	.42***
Total Score	-.18**	-.33***	-.14*	.25***
IES Subscales				
Avoidance	-.04	-.10	-.23***	.11*
Intrusions	-.19***	-.18**	-.17**	.18**
TRIG Subscales				
Past Behavior	-.38***	-.24***	-.03	.16**
Present Feelings	-.34***	-.24***	-.20***	.19***
Self ratings				
Recovery	.22***	.15**	.17**	-.13*
Acceptance	.10	.22***	.18**	-.24***

[a]Rank transformed scores.

[b]closeness was coded such that lower numbers indicate greater closeness, so that a negative correlation with an outcome variable indicates that the closer the relationship, the greater the grief reaction.

*p<.05, **p<.01, ***p<.001

Table 8

Intercorrelation Matrix of Covariates

	Covariate			
Variable	1.	2.	3.	4.
1. Closeness				
2. Age of deceased	-.09			
3. Time since death[a]	-.10	-.02		
4. Preventability	.05	-.36***	.02	

[a]months.

***p<.001

appropriate contrasts entered as the second block in the equations. The final block consisted of the interaction terms (each covariate x the contrast).

Given four groups, one is allowed to test three contrasts (group comparisons) per dependent (outcome) variable. Group membership for these contrasts was defined using contrast codes. On theoretical grounds, the threetested contrasts per outcome variable were (a) suicide survivors versus all others (to test the "unique" influence of suicide as a mode of death), (b) suicide and accident versus natural death groups (to test the influence exerted by "unnatural" as opposed to "natural" type deaths), and (c) suicide, accident, and natural unanticipated groups versus the natural anticipated group (to test the role of the "anticipation" factor).

Given that the previously noted contrasts were not orthogonal, separate regression models were computed for *each* of the three contrasts over the 18 outcome variables (resulting in a total of 54 regression models) in order to prevent the contrasts from interfering with each other due to their relationship.

One advantage of this strategy is that it allowed for the testing of interactions between the covariates and the contrasted groups. Given that a total of 90 regression analyses were conducted, an alpha level of .001 was selected for an effect to attain statistical significance. With this more stringent alpha level, no significant covariate by contrast interactions were found. This being the case, all multiple regression equations were recomputed, this time without the third block of terms (interactions) entered into the equation. This was done in order to

simplify the resulting model, in light of the fact that the interaction terms provided no significant increment in available information. By rerunning the analyses (all 90) without the interaction terms, the resultant equations became conceptually purer, and the direct interpretation of mode of death effects was undertaken on all outcome variables.

In all cases, the adjusted rank means of the contrasted groups were calculated using formulas presented by Cohen and Cohen (1983). These calculation formulas are presented in Appendix D for the interested reader. These adjusted mean ranks are then presented in Table 9, which summarizes the results of each planned comparison (contrast) for each of the outcome variables. As can be seen, several statistically significant results were obtained. As a reminder regarding the meaning of the adjusted mean ranks, the higher the value on the GEQ, IES, and TRIG, the more prominent the reaction in the particular group (or combination of groups) included in the contrast. On the acceptance and perceived recovery variables, higher scores indicate a greater degree of these encouraging signs of adaptation to the loss.

The pattern of results, as presented in Table 9, was further clarified through re-analyzing the contrasts where suicide was included and combined with one or more other groups because of its status as an unnatural and unanticipated death. The rationale for recomputing these two contrasts (unnatural versus natural and unanticipated versus anticipated) over the entire set of outcome variables with the suicide survivors *excluded* is that these results allowed for a

Table 9

Regression Results: Adjusted Mean Ranks of Outcome Variables by Contrast

	Contrasts					
Outcome variables	Suicide vs. all		Unnat.[a] vs. nat.[b]		Unant.[c] vs. ant.[d]	
GEQ subscales						
Physical Reactions	172.4	174.6	160.4	179.8	170.1	180.1
General Grief Reactions	196.1	172.4	168.3	171.2	177.6	170.7
Search for Explanation	203.2	171.5 *	171.3	175.5	186.4	160.1 *
Loss of Social Support	194.2	173.6	179.1	175.7	181.3	170.0
Stigmatization	222.6	169.1 **	182.9	171.8	183.7	162.3
Guilt	175.9	171.6	148.3	181.5 *	170.3	175.1
Responsibility	234.4	168.0 ***	161.0	179.9	175.0	174.6
Shame	223.4	168.4 **	176.0	173.4	176.0	172.6
Rejection	281.2	163.3 ***	205.9	164.1 **	184.4	163.2
Self-Destructive Behavior	166.8	176.6	165.9	178.5	178.2	171.6
"Unique" Reactions	271.6	163.9 ***	211.1	161.7 ***	190.0	172.5 **
Total Score	231.4	169.9 ***	175.4	176.9	182.5	162.4
IES subscales						
Avoidance	192.3	175.9	154.6	185.6	182.1	170.7
Intrusions	192.9	171.4	173.6	177.7	184.0	165.6
TRIG subscales						
Past Behavior	198.3	172.5	180.1	172.5	183.0	165.4
Present Feelings	181.7	170.3	161.6	177.7	179.1	166.8
Self ratings[e]						
Acceptance	170.2	175.0	189.6	170.3	142.0	157.8
Recovery	168.1	174.5	185.6	168.9	165.7	183.5

Note.
[a]unnatural = suicide and accident
[b]natural = natural causes
[c]unanticipated = suicide, accident, and natural unanticipated
[d]anticipated = natural anticipated
[e]higher rank scores indicate greater acceptance and recovery.

*$p<.05$, **$p<.01$, ***$p<.001$

more refined analysis of the "pure" influence of suicide as a factor in grief reactions as opposed to the influence of the broader *aggregate* factors which are also attributes of suicidal deaths. The results of these contrasts are presented in Table 10. The interested reader may wish to consult Appendices E through I for the complete results of each of the 90 multiple regression equations, as these equations are the basis upon which the statistical significance for mode of death effects was determined.

For those cases in which mode of death effects were indicated (including trends), a measure of effect size recommended by Cohen and Cohen (1983) was used to give an indication of the strength (or magnitude) of that particular effect. These authors note that a meaningful effect size measure for ANCOVA done through multiple regression is the squared multiple partial correlation (in our case between the contrast and the outcome variable) as derived from the regression output. This correlation has the effect of the covariates removed from both the contrast variable and the outcome measure, thereby indicating the *particular* magnitude of the mode of death effect in relation to the given outcome variable. This value will be presented in text in conjunction with each mode of death effect in order to allow for assessment to be made of the magnitude of each indicated effect.

From these regression analyses (90 in total), it was the *pattern* of results that was considered for each of the outcome variables. This method of analysis and interpretation provided a means of untangling the effect of (a) *suicide* as the

Table 10

Regression Results: Adjusted Mean Ranks of Outcome Variables for Contrasts with Suicide Group Removed from the Unnatural and Unanticipated Conditions

	Contrasts			
Outcome Variables	Unnatural[a]	vs. natural	Unanticipated[b]	vs. anticipated
GEQ subscales				
Physical Reactions	154.4	179.2	169.8	179.9
General Grief Reactions	137.2	184.8 **	176.7	173.0
Search for Explanation	153.0	180.6	185.5	162.9 *
Loss of Social Support	168.6	181.4	180.3	171.7
Stigmatization	157.0	179.8	181.4	167.5
Guilt	134.0	182.0 *	169.4	175.0
Responsibility	117.6	189.3 ***	174.3	184.2
Shame	146.4	181.0	172.3	177.1
Rejection	155.0	180.5	177.4	173.4
Self-Destructive Behavior	167.4	177.7	179.4	171.1
"Unique" Reactions	168.2	176.4	184.3	164.4
Total Score	140.3	185.0 *	181.7	170.2
IES subscales				
Avoidance	134.2	187.6 **	181.8	172.3
Intrusions	161.4	179.8	183.7	167.3
TRIG subscales				
Past Behavior	169.2	176.9	181.9	167.5
Present Feelings	149.0	179.3	178.9	167.8
Self ratings[c]				
Acceptance	197.9	168.5	166.9	182.7
Recovery	195.1	168.1	165.4	182.9

[a]Unnatural = accident only
[b]Unanticipated = accident and natural unanticipated
[c]higher rank scores indicate greater acceptance and recovery.

*p<.05, **p<.01, ***p<.001

cause of death, as well as the aggregate factors of (b) *naturalness*, and (c) *anticipation,* in terms of their respective influences on grief reactions.

Suicide: unique effects on grief

Regarding the unique influence upon grief exerted by suicide, results indicated that survivors of suicide reported a significantly greater frequency of occurrence of feelings of responsibility for the person's death as compared with all of the other survivor groups (effect size of .04). Interestingly, the contrast testing the influence of the "naturalness" factor with the suicide survivors excluded indicated that natural death survivors reported significantly greater frequencies of this same reaction than did the accidental death survivors (effect size of .05). From these two results, it was not clear whether the fact of suicide as the mode of death, or the aggregate factor of "naturalness," was of primary influence regarding feelings of responsibility. To refine our understanding, the suicide survivors were compared *directly* against the two natural death groups in an additional multiple regression analysis (see Appendix J for regression output). Although this contrast did not reach the stringent .001 level of significance, the suicide survivors evidenced a trend ($p<.028$, effect size = .02) toward experiencing more frequent feelings of responsibility (mean adjusted ranks of 207.6 and 165.1 for the suicide and natural death survivor groups, respectively). It thus appears that suicide as the mode, as opposed to the aggregate factor of "naturalness/unnaturalness" of the death, is the primary factor which accounts for the more frequent feelings of responsibility reported by

the suicide survivors.

In addition to more frequent feelings of responsibility, suicide survivors also reported significantly higher levels of "overall grief" ($p<.001$, effect size = .04) as indicated by the GEQ total score. Similar to feelings of responsibility however, a trend was evident wherein accidental death survivors reported lower levels of overall grief than did the composite of the natural death survivor groups ($p<.012$, effect size = .02). This finding, as was the case in the previous section, necessitated the running of an additional (and final) contrast, again between the suicide and natural death survivors (refer again to Appendix J for regression output). As above in the suicide/natural death contrast for responsibility, suicide survivors responses were indicative of a trend ($p<.012$, effect size = .02) toward higher levels of overall grief than that reported by the natural death survivors (mean adjusted ranks of 216.2 and 168.6 for the suicide and natural death survivor groups, respectively). These results suggest that survivors of suicide, as compared to non-suicide survivors, are significantly more likely to experience an accentuated overall reaction to the loss .

With regard to the "unique reactions" subscale of the GEQ, results are unequivocal in showing that suicide survivors were significantly more likely to endorse the reactions included in this rather heterogeneous (alpha = .56) "scale" than were any of the other survivor groups ($p<.001$). However, the interpretation of this result is difficult, as it does not appear to be the case that this scale is measuring a single grief related construct. Considering that the original intent of

this scale, as described by Barrett and Scott (1989), was to assess reactions which, from an intuitive sense, are unlikely to occur in the grief experience of non-suicidal death survivors, it is reasonable that the items of this scale are as greatly divergent as they are. Therefore, in order to clarify the meaning(s) of the significant difference between the suicide survivors and all other survivors on this scale, one-way ANOVA's were computed for each of the component items (using rank transformed values as explained above).

Results of these ANOVA's indicated that the suicide survivors, as compared to all other survivor groups, reported the following: (a) wondering more often about the person's motivation for not living any longer $\underline{F}(3, 343) = 49.27$, $\underline{p}<.001$, (b) feeling that they should have somehow prevented the death, $\underline{F}(3,343) = 15.12$, $\underline{p}<.001$, and (c) telling others that the cause of death was something different than it really was, $\underline{F}(3, 343) = 9.27$, $\underline{p}<.001$. In addition, a trend was evident in which the suicide survivors reported more often than the other groups the feeling that the deceased was somehow getting even with them by dying $\underline{F}(3, 343) = 5.07$, $\underline{p}<.01$.

The survivor groups also differed significantly on the item assessing feelings that the death was a senseless and wasteful loss of life. Although these differences were not indicative of intensified reactions only for suicide survivors, which is the unifying theme for results presented in this section, the nature of these differences will be presented here in order to fully develop the meaning of the effects found on the Unique Reactions subscale. Results indicated that both

the suicide and accidental death survivor groups felt this way more frequently than did the natural death survivor groups, and in addition, the natural unanticipated group reported this reaction to a greater extent than did the natural anticipated group $F(3, 343) = 25.17$, $p<.001$). The raw means and standard deviations for each of the survivor groups on the variables of this subscale are presented in Appendix K to aid in the reader's interpretation.

Yet another reaction that differentiated the bereavement process of suicide survivors from that of the other survivor groups was the experience of feeling rejected by the deceased ($p<.001$, effect size = .15). The mean rank for the suicide survivors of 281.2 was the highest of any of the assessed reactions, regardless of which survivor group one examines. Now, although a trend was evident when the unnatural versus natural death survivor groups were compared initially, this effect dropped out when the contrast was rerun with the suicide survivors removed. The fact that the contrast no longer reached levels indicative of group differences when the influence of the suicide survivors was taken away is another indicator of the strong influence exerted by suicide on this particular grief reaction. In addition, the moderately high effect size of .15 further supports the influence that suicide has in terms of evoking this reaction, a reaction which likely compounds the already onerous challenges faced by the bereaved as they attempt to regain their equilibrium in the face of loss.

In addition to being significantly different from the other groups of survivors on the above mentioned grief reactions, the responses of suicide survivors

indicated trends toward greater perceived stigmatization ($p<.003$, effect size = .03) and a sense of shame and embarrassment following the death ($p<.003$, effect size = .03). No further differences were present which distinguished the suicide survivors from the other groups of survivors, although as is clearly evident from the above results, suicide as the mode of death did significantly influence the grief reactions of those for whom this mode of death was experienced.

It will also be apparent from an examination of the Rejection and Unique Reactions subscales as presented in Tables 9 and 10 that, while in Table 9 the aggregate factors of naturalness and anticipation appeared to influence these reactions, reanalysis with the influence of the suicide group removed (Table 10) showed that these effects dropped out. This result points to the robust influence of suicidal deaths in the evocation of these particular reactions.

Effects on grief related to the aggregate factor of "naturalness" of the death

Results of the effect of the naturalness of the death were indicative of several trends. In the first case, the natural death survivor groups, as compared to only the accidental death survivor group, reported the more frequent experiencing of general grief reactions in response to the death. The natural death composite group mean of 184.8 was substantially higher than the mean of 137.2 reported by the accidental death survivors ($p<.009$, effect size = .02). As well, the only grief reaction to differentiate among the current functioning (within the week prior to participation) of the groups was the more prominent reporting of avoidance

type behaviors by the natural death survivors than by the accidental death survivors ($p<.005$, effect size = .03).

In contrast to the two above noted differences which were limited to only the natural and accidental death survivors, the grief reaction of guilt was influenced more clearly by the aggregate factor of naturalness, although in the opposite direction of what might be expected. Results indicated that the unnatural death groups (accident and suicide) reported a trend toward having felt *less* guilt than that experienced by the natural death groups ($p<.05$, effect size = .01).

Effects on grief related to the aggregate factor of "anticipation" of the death:

After losing someone through death, survivors often try to formulate for themselves an explanation as to the cause and circumstances surrounding the death. This search for understanding and explanation was the most clearly affected of the grief reactions influenced by the aggregate factor of anticipation of the impending nature of the death. As is evident in Table 9, a trend was indicated whereby suicide survivors experienced this reaction more frequently than did the composite of the other survivor groups ($p<.04$, effect size = .01). An advantage of the multiple regression approach utilized is evidenced here in that by contrasting the unanticipated and the anticipated survivor groups (in the absence of the suicide survivors), results made it clear that this effect may more accurately be understood as a reflection of the lack of anticipation ($p<.03$, effect size = .01), as opposed to being uniquely attributable to the cause of death being a suicide. It thus appears that it is not suicide in and of itself which evokes

this reaction in survivors, but rather, that deaths which the survivors did not anticipate tend to push them to search for answers which may allow them to attain some form of meaning and clarity regarding the circumstances surrounding the death. No further differences (main effects) between the survivor groups were indicated.

Covariate by Group Contrast Interaction Trends

Regarding the interaction terms, it was previously noted that no significant ($p<.001$) covariate by contrast interaction effects were found. It may be recalled that the four interaction terms, composed of the contrast by each of the four covariates, were entered as the final block in the regression equations. In order for any of the individual covariate by contrast interactions to be interpreted (i.e., closeness by the contrast of suicide versus all other groups), the entire *block* first had to be significant (in terms of the increment in R^2 accounted for by the block). In seven cases, this third block was indicative of trends, being significant at the $p<.05$ level. These trends will be described below.

On the GEQ General Grief subscale, the four interaction terms, composed of the contrast of "unnatural" versus "natural" survivor groups by each of the four covariates, were entered in the final block. This block accounted for an R^2 change of .01, $F(9, 316 = 4.29, p<.002)$. The specific predictor which approached significance was perceived closeness to the deceased ($t = -3.88$, $p<.001$). Closeness was more related to grief in the unnatural conditions than in the natural death groups; with higher perceived closeness to the deceased,

there was a higher level of grief reported by the "unnatural death" group than by the "natural death" survivor group. Another trend was evidenced on this same scale when the contrast included unanticipated versus anticipated survivor groups [R^2 change = .03, $F(9, 316 = 3.08, p<.02)$]. As in the previous case, the specific predictor which approached significance was perceived closeness to the deceased ($t = -2.56, p<.05$). Closeness was more related to grief in the unanticipated groups than in the anticipated survivor group; grief tended to decrease more with lessening closeness for the unanticipated death survivors as compared with the anticipated survivor group.

On the GEQ Search for Explanation subscale, the four interaction terms, composed of the contrast of suicide versus all other groups by each of the four covariates, were entered in the final block. This block accounted for an R^2 change of .02, $F(9, 316 = 2.43, p<.002)$. The specific predictor which approached significance was the age of the deceased ($t = -2.77, p<.006$). For suicide survivors, search for explanation increased with the age of the deceased, while for non-suicide survivors the opposite pattern emerged, with less search for explanation with increased age of the deceased. On this same outcome variable, the contrast of unnatural versus natural deaths produced an R^2 change of .03, $F(9, 316 = 3.54, p<.008)$. The specific predictor which approached significance was again the age of the deceased ($t = 3.14, p<.002$). Here, the age of the deceased was more related to search for explanation for "natural death" survivors; as the age of the deceased increased, this search

lessened more for these survivors than for the "unnatural death" survivors, who showed a very slight increase in their search for answers.

In terms of self-destructive behaviors on the part of the bereaved, the four interaction terms, composed of the contrast of unnatural versus natural death survivor groups by each of the four covariates, were entered in the final block and accounted for an R^2 change of .03, $F(9, 316 = 2.50, p<.05)$. The specific predictor which approached significance was the perceived closeness to the deceased ($t = -2.49, p<.01$). Closeness to the deceased was more related to the reporting of these behaviors in unnatural than natural deaths. As the perceived closeness to the deceased lessened, the "unnatural" survivor groups showed a greater decrease in self-destructive behaviors than did the "natural death" survivor groups.

The two remaining trends occurred on the GEQ total score, which is a summation of all of the individual items. First, the block of the four interaction terms, composed of the contrast of unnatural versus natural death survivor groups by each of the four covariates, accounted for an R^2 change of .03, $F(9, 316 = 2.93, p<.05)$. In this case, two specific predictors approached significance. In the first case was the perceived closeness to the deceased ($t = -2.16, p<.05$). Here, closeness was more related to total grief in the "unnatural death" survivor groups, with greater decreases in total grief for these groups as the closeness of the relationship lessened than that evidenced by the "natural death" survivor groups. In the second case, the specific predictor to

approach significance was the age of the deceased ($t = 2.23$, $p<.05$). Here, the unnatural death survivor groups evidenced a slight increase in total grief with increased age of the deceased, whereas the natural death groups evidenced a marked drop in total grief as the age of the deceased increased.

Finally, On the Intrusions subscale of the IES, the four interaction terms, composed of the contrast of unanticipated versus anticipated death survivor groups by each of the four covariates, accounted for an increment in R^2 of .03, $F(9, 316 = 3.07, p<.05)$. The specific predictor which approached significance was the age of the deceased ($t = 2.62$, $p<.01$). For the anticipated survivor groups, intrusions decreased markedly as the age of the deceased increased, whereas the unanticipated survivor groups evidenced only a slight downward trend of lessened intrusions with older deceased individuals.

Suicide survivors revisited

In the present section, a descriptive portrait of the grief experiences of the survivors of suicidal deaths will be presented. For the purposes of this section, two suicide survivors were excluded as they reported that their closeness to the deceased was "not very close at all." Therefore, the portrait presented herein is informative of the remaining 32 survivors.

Demographically, this survivor group was composed of 24 females (75%) and 8 males (25%) with a mean current age of 20.0 years (SD = 2.79; range = 18-33 years). The mean age of these survivors at the time of the death was 16.19 years (SD = 3.55; range 9-21 years). On average, the death had occurred some

46.4 months (approximately 3.8 years) prior to their participation in the study (SD = 56.87; range = 5 months to 24.7 years). Regarding the relationship between the survivor and the deceased, the deceased was a friend in 13 (40.6%) of these cases, with the remaining identified as great grandparents (7 or 21.9%), grandparents (4 or 12.5%), fathers (3 or 9.4%), uncles (3 or 9.4%), or aunts (2 or 6.3%) of the survivor. The average age of the deceased was 33.78 (SD = 17.43; range from 15-80 years).

In terms of the degree of closeness felt by the survivor toward the deceased, two survivors (6.3%) reported that their relationship with the deceased was "closer than any relationship I've had before or since," 10 (31.1%) reported that it was "closer than most relationships I've had with other people," 12 (37.5%) reported that it was "about as close as most relationships with others," and the remaining eight (22.0%) reported it as being "not as close as most relationships." Survivors were also asked to indicate their current degree of attachment/closeness to the deceased on a likert scale ranging from 0 ("not close at all") to 10 ("extremely close"). The mean score on this scale was 6.67 (SD = 2.09), indicating that, in an overall sense, these survivors still felt moderately close to the deceased.

On average, these survivors indicated that they had accepted the death and recovered from it to a considerable extent. In terms of acceptance of the death, the mean score was 6.94 (SD = 2.65) on a scale ranging from 0 ("have not accepted it at all") to 10 ("completely accepted it"). Regarding recovery, the

mean was 7.61 (SD = 2.14) on a scale where 0 indicated that the survivor "had not recovered at all" and 10 indicated that they had "completely recovered."

Circumstances surrounding the death were also assessed. In only two cases was it reported by survivors that they had witnessed the body at the death scene, with one of these individuals indicating that they were the first one to discover the body. In this instance, the survivor was nine years old when she actually witnessed her father take an overdose of pills that resulted in his death. This was the only survivor to report that they had witnessed the suicidal incident. The finding of a suicide note was a rather frequent occurrence, being reported by 15 of these survivors, 10 of whom read its' contents (none reported that they felt blamed by the deceased in the suicide note). Survivors also reported that in six of the cases the deceased had made a previous attempt.

Five survivors (14.7%) reported that they had had advance warning that the person would soon die. In three of these cases the nature of the advance warning centred around the deceased talking about ending his or her life. Further, 25 of these survivors (79.4%) reported that they believed the death to have been preventable, with four of the previously mentioned five survivors who reported having had advance warning responding in the affirmative to this inquiry. The reasons given by these survivors are illuminating in that they serve well to illustrate the wide range of views held as to the reasons for any given suicide as well as what could have been done to prevent it. The verbatim responses of these survivors to the inquiry of "please explain how you believe

the death to have been preventable" are reproduced in Appendix L for the interested reader. In four cases (11.8%), survivors reported feelings of relief that the person had died. These verbatim responses are also reproduced in Appendix M.

The utilization of support services by these survivors was also assessed. Seven of the survivors reported that they had thought about joining a bereavement support group since the death, with four of these survivors (12.5%) actually attending at least one such meeting. Eleven (34.4%) of the survivors also reported obtaining professional help to deal with their feelings regarding the death.

These survivors, as were all participants, were also asked to indicate whether responding to the questions of this study had made them upset in any way. Importantly, regarding the ethics of conducting grief research, while 11 (35.3%) survivors reported that they had become upset while reporting on their experiences, *none* of the 32 reported that they regretted their participation when asked. In fact, in a space reserved for the comments of the participants (regarding anything about the study or their participation in it), six of these survivors either thanked the investigator for allowing them the opportunity to share their experiences or noted that in some way it was helpful to them. In no case was a negative response to participating in the study indicated.

The grief reactions of these survivors, as assessed by the Grief Experiences Questionnaire will now be considered in order to illuminate the experience of

losing someone to suicide. The reactions assessed by the GEQ were arranged in descending order of reported frequency to assess the extent to which each can be viewed as being a more or less characteristic feature of the process of grieving a suicidal death. As previously mentioned, the GEQ was specifically designed to tap into specific components of grief which may be experienced following a death due to suicide, with each of the subscale scores ranging from a minimum of 5, indicating that the reaction has "never" occurred, to a maximum of 25, indicating that the reaction has occurred "almost always" since the death. As can be seen in Table 11, which lists the reactions in descending order of frequency, the most frequently reported reaction to the suicide was that of a search for explanation, followed by "unique" reactions and guilt. The least endorsed reaction was that of self-destructive behavior on the part of the survivor.

Regarding the covariates utilized in this study, correlations were computed between each of the four covariates and the outcome measures. The purpose of this analysis was to look more closely at how the grief reactions of the suicide survivors' in particular were related to the covariates, as opposed to the grief reactions of the entire sample, as was done previously. Table 12 presents the entire correlation matrix. As can be seen for these suicide survivors, the closeness to the deceased was the most highly influential of the four covariates, while the time since death and perceived preventability of the death were less directly related to their grief. Regarding closeness, the abundance of negative

Table 11

Relative Frequency of Specific Grief Reactions Experienced by Suicide Survivors as Assessed by the Grief Experience Questionnaire (n = 32)

Rank order of GEQ subscales	Mean	SD	Range
1. Search for Explanation	18.66	4.26	11 - 25
2. "Unique" Reactions	14.03	3.28	8 - 20
3. Guilt	13.75	5.42	5 - 25
4. Shame	13.38	5.34	5 - 24
5. Rejection	13.22	5.80	5 - 25
6. General Grief Reactions	12.86	4.43	6 - 23
7. Stigmatization	10.40	4.99	5 - 23
8. Physical Reactions	10.22	4.18	5 - 19
9. Loss of Social Support	9.75	4.06	5 - 20
10. Responsibility	9.38	4.27	5 - 18
11. Self-Destructive Behavior	7.68	2.75	5 - 16

Note. The subscales are scored as follows: 5 (never), 10 (rarely), 15 (sometimes), 20 (often), and 25 (almost always) instead of 1, 2, 3, 4, or 5 in order to account for the five items which compose each subscale. The midpoint of each scale is 15.

Table 12

Suicide Survivors: Correlation Matrix of Covariates with Outcome Variables

	Covariate			
Outcome Variables[a]	Closeness[b]	Age of deceased	Time since death	Preventable
GEQ Subscales				
Physical Reactions	-.44*	-.07	-.24	.10
General Grief Reactions	-.43*	-.32	.01	.00
Search for Explanation	-.33	-.03	-.22	.14
Loss of Social Support	-.32	.04	.31	.25
Stigmatization	-.24	-.25	.10	.28
Guilt	.00	-.34	-.35*	.23
Responsibility	-.33	-.30	-.03	.25
Shame	-.06	.01	-.05	.04
Rejection	-.49**	-.31	.22	.05
Self-Destructive Behavior	-.61***	-.42*	.01	-.09
"Unique" Reactions	-.27	-.42*	.16	.15
Total Score	-.42*	-.30	-.02	.18
IES Subscales				
Avoidance	.05	.10	-.30	.00
Intrusions	-.03	.06	-.29	.03
TRIG Subscales				
Past Behavior	-.52**	-.45*	.05	.04
Present Feelings	-.48**	-.20	-.24	-.17
Self ratings				
Recovery	.26	.01	.06	.36*
Acceptance	.03	-.15	.22	.06

[a]raw scores

[b]closeness was coded such that lower numbers indicate greater closeness, so that a negative correlation with an outcome variable indicates that the closer the relationship, the greater the grief reaction.

*p<.05, **p<.01, ***p<.001

correlations to reach at least trend status strongly suggest that the closer one is to the deceased, the greater the impact of the loss across a wide variety of responses. A further point of interest is that the grief reaction of guilt, a reaction often reported in autobiographical suicide survivor reports, was not related to closeness, but rather, was negatively correlated with the time since death. The age of the deceased was also related to grief to some extent, with the pattern of correlations suggesting that younger deceased tend to evoke more frequent grief reactions.

Finally, analyses were undertaken to clarify the extent of the relationship between the grief reactions of these survivors. To accomplish this aim, an intercorrelation matrix of all outcome variables was calculated and is presented in Table 13. As with the above correlations between the covariates and the outcome measures, several interesting pieces of information were gleaned from this analysis, a few of which will be discussed herein. The high correlation between stigma and loss of social support [$r(32) = .71$, $p<.001$] lends credence to the oft heard tale of how the stigma of a suicide is related to diminished social support from others. Stigma was also significantly related to feelings of responsibility for the death [$r(32) = .66$, $p<.001$] and shame at its cause [$r(32) = .68$, $p<.001$]. Also, the fact that feeling rejected and abandoned by the deceased was significantly related to feelings of responsibility for the loss [$r(32) = .75$, $p<.001$] is noteworthy. What then these survivors were reporting was that the more responsibility they took for the well-being of the deceased, the

Table 13

Intercorrelation Matrix of Raw Scale Scores on the Grief Experiences Questionnaire (GEQ), Impact of Event Scale (IES), Texas Revised Inventory of Grief (TRIG), and Self-Ratings of Acceptance and Recovery for Suicide Survivors (n=32)

Scales	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.
1. GEQ Physical																	
2. GEQ General Grief	.43*																
3. GEQ Search	.39*	.36*															
4. GEQ Social Support	.12	.51**	.14														
5. GEQ Stigma	.12	.57**	.22	.71***													
6. GEQ Guilt	.18	.52**	.33	.21	.46**												
7. GEQ Responsibility	.28	.55**	.38*	.50**	.66***	.63***											
8. GEQ Shame	.20	.61***	.38*	.58***	.68***	.51**	.47**										
9. GEQ Rejection	.36*	.73***	.30	.59***	.58**	.48**	.75***	.50**									
10. GEQ Self-destructive	.50**	.73***	.32	.39*	.25	.35*	.46**	.34	.69***								
11. GEQ "Unique"	.06	.62***	.36*	.54**	.62***	.56**	.54**	.65***	.72***	.52**							
12. GEQ Total	.45*	.84***	.53**	.67***	.77***	.69***	.81***	.77***	.85***	.68***	.78***						
13. IES - Avoidance	.29	.55**	.34	.22	.47**	.55**	.37*	.51**	.22	.26	.21	.52**					
14. IES - Intrusions	.37*	.54**	.39*	.17	.35	.49**	.39*	.40*	.27	.31	.15	.50**	.83***				
15. TRIG - Past	.43*	.71***	.37*	.40*	.58**	.57**	.65***	.52**	.78***	.58**	.62***	.79***	.40*	.42*			
16. TRIG - Present	.50**	.65***	.60***	.35*	.39*	.55**	.49**	.56**	.59***	.71***	.49**	.74***	.45*	.50**	.67***		
17. Acceptance	.19	.03	.26	.04	.04	.11	.04	.08	.11	.03	.12	.06	.13	.30	.08	.38*	
18. Recovery	.44*	.36*	.33	.11	.01	.21	.19	.17	.32	.52**	.10	.33	.23	.29	.35*	.69***	.63***

Note. Underlined values represent negative coefficients.

*p<.05, **p<.01, ***p<.001

greater was their sense of abandonment when the deceased chose to end his or her life. Finally, the relatively low correlations between the reaction of searching for answers and the other grief reactions assessed by the GEQ is interesting in light of the fact that this reaction was the single most often one reported by these survivors. The fact that it does not correlate to a great extent with many of the other grief reactions hypothesized to be characteristic of suicide induced grief, but does significantly relate to more difficulty in terms of present feelings about the death [$r(32) = .60$, $p<.001$] suggests that the search for answers is an important response to suicide.

CHAPTER V

DISCUSSION

The results of the present investigation have provided evidence supporting the popular conception of intensified reactions in grief due to suicide as compared with grief due to other causes. The most substantial of the findings concerned differences in the highly specific grief reactions assessed on the subscales of the Grief Experiences Questionnaire.

Suicide survivors reported more frequently the experiencing of feelings of rejection and abandonment as a consequence of the deceased's chosen method of death. This finding concurs with findings from both individual narratives (Alexander, 1991), and comparison group studies (Barrett & Scott, 1990). The data from the present study suggest that it is only in the infrequent case in which a non-suicide survivor responds with such feelings, as the mean score on the rejection scale was lower than that of any other scale for overall sample. Interestingly, the next most infrequently reported reaction, the feeling of responsibility for the death, also was one which significantly differentiated the suicide survivors form all others. The fact that the two most infrequently reported grief reactions were also the two that most distinguished grief associated with suicide points to the notion that it is in the specifics that differences are likely to be found, and where indeed they should be sought.

To further elaborate on the importance of utilizing assessment instruments that target specific grief reactions as opposed to more all-encompassing scales that measure the collection of symptoms known as "grief," in no case in the present study was a significant mode of death effect found on the TRIG or IES. One plausible explanation for this finding is that these scales define the constituent symptoms of the grief response broadly, seeking to assess what might be called the "overall" reaction to the event. It seems that not only are we less likely to find mode of death effects utilizing such measures, but in addition, interpretation becomes clouded as the imprecise nature of the instrument precludes analysis and explanation of the precise nature of the difference(s) involved. It is instructive to restate Averill's (1968) caveat against treating a complex and highly diversified behavior pattern such as grief as if it can be studied without reference to its particular constituents.

With regards to further evidence for the uniqueness of the suicide survivor experience as indicated in the present study, the reactions of shame and stigmatization that were reported more frequently by these survivors mirror the considerable weight given these factors in the literature. These factors are viewed as being capable of turning the grief process into an extended and contorted one for the survivor of "the suicide" (McIntosh & Wrobleski, 1988; Noyes, 1968; Solomon, 1982). As defined by Goffman (1963), a stigma is a mark of shame or disgrace, whether visible or not, which potentially detracts from the character or reputation of the person. Suicide survivors in this study

corroborated existing evidence suggesting that for the survivor of a suicide, the issues of perceived stigmatization and feelings of shame and embarrassment do set one apart from those who mourn non-suicidal deaths. These results also support the contention of Seguin et al. (1993) who provide evidence for the central role played by feelings of shame in suicide bereavement. These authors also share in the view of the present author that it is the subtleties in grief to which we must direct our research attention, because these not so readily apparent effects can have a significant effect in terms of the course and extent of one's grief, especially as the cumulative force of many unique reactions (i.e., feeling abandoned, responsible, stigmatized) builds.

Further evidence of the uniqueness of suicide came from the fact that suicide survivors reported spending a greater proportion of their time dialoguing with themselves concerning the motivation of the person who killed him or herself, and more broadly, asking themselves the familiar "why?" reported so frequently in the suicide survivor literature (Calhoun et al., 1982; Van Dongen, 1988, 1990). The present finding, using a comparison group methodology, corroborates nicely the report of the survivor who reported to Buksbazen (1976) that:

> "...it just remains a mystery that you can't really let go of and that you can't deal with, because there's nobody there to answer when you hit the right answer to the riddle. You might go on to another answer because you didn't know that that was the right one" (p. 107).

It thus appears, from both individual narrative and comparison group

methodologies, that the reaction of searching for answers is more likely to be evidenced in the survivor of suicide, particularly when compared to anticipated death survivors.

In the quest for resolution and clarity associated with the circumstances surrounding the death, unanticipated death survivors evidenced this tendency to search to a greater extent than did anticipated death survivors. This trend corroborates previous research showing that deaths which are sudden and unexpected tend to impose a greater burden on the bereaved (Parkes & Weiss, 1983), as they then face the additional task of trying to come to grips with an event which has most likely has caught them offguard and unprepared. In addition, unfinished business with the deceased is likely to remain, and the shattering of the commonplace belief in a fair and just world are but just two of the possible consequences of becoming bereaved through an unanticipated death.

Moving away from the issue of uniqueness of suicidal grief for the present time, the issue of the high number of statistical tests utilized in this study bears comment. It is recognized that by performing the number of cross-group comparisons as was done leads to an increased likelihood of the reporting of spurious "significant" results. However, by adopting the stringent alpha of $p<.001$ as the criteria for the determination of significance, it is likely the case that the present results are not solely the product of chance. Further, effect size estimates, although most often low, were not altogether absent (especially in the

case of rejection where the effect size was .15). Another indication of the likely robustness of the results that met the previously defined significance requirements can be derived from an examination of the absolute differences, which range from a low of 61.5 to a maximum of 117.9 between the adjusted mean ranks of the contrasts examining suicide survivors versus all others. Thus, while caution must be utilized, several lines of evidence relating to both the statistical significance levels and the effect size magnitudes point to the judgement that the large number of analyses were not the sole cause of the reported group differences.

One further characteristic evidenced by the suicide survivors group that warrants consideration is the greater variability among this group than that demonstrated by the other survivor groups. This increased variability was particularly evident on the grief reactions that are intuitively more related to suicide, such as rejection, responsibility, shame, and stigmatization. These results point to the conclusion that, even though this study was interested in examining the "uniqueness" of grief due to suicide, one should not ever be led to the belief that "suicide survivors" are a homogenous group. If anything, the results of this investigation indicate that this group evidences *more* variability that do other survivor groups. What you have then is a large proportion of suicide survivors at opposite ends of the hypothetical continuum on any given grief reaction. Future research would do well to investigate, in addition to the uniqueness of suicide survivors as a group, this within group variability in order

to further elucidate factors which influence satisfactory versus impaired functioning in the wake of a completed suicide.

Also of some importance is the fact that the covariates utilized in this study (perceived closeness to and age of the deceased, preventability of the death, and time since death) also contributed significantly in allowing for the prediction of grief. Even though this investigation focused on the delineation of significant mode of death effects almost exclusively, it should not be lost on the reader that mode of death is but one of many factors which combine and conspire to influence grief. In the present research, the finding of several covariate by mode of death contrast interactions (trends) points to the need for future consideration to be given to these, and many other, potentially predictive variables (personality characteristics of the bereaved, number of previous bereavements, etc.).

In terms of limitations of the present study, factors such as the retrospective design, the wide variability in time since death, and the mixing of immediate and non-immediate family members count as such. In addition, the fact that exclusively college students were utilized places limits on the generalizability of the present results. However, the comparison group methodology, the utilization of standardized and psychometrically sturdy measures, and the relatively large sample size speak to the issue of the validity of these results which indicated that suicide as the mode of death *did* place those who survived this type of loss in a different position in terms of experienced grief reactions. It remains for future research to further delineate the specifics common among suicide

survivors, and to further examine this fascinating collection of individuals from all walks of life in order to broaden our understanding of the factors which may be of particular importance in the influencing of their grief.

APPENDIX A

Questionnaire Constructed by Investigator

Please indicate your Date of Birth:
Day ____
Month ____
Year ____
Current Age ____

Please answer the following questions about yourself by circling the letter corresponding to your response.

Sex: a) male b) female

Marital Status: a) single b) married c) separated
d) divorced e) widowed f) never married

Currently living: a) with spouse b) with partner c) with family
d) with friend e) other _____

Student Status: a) full time
b) part time
c) occasional (less than 2 courses/year)

Please indicate the highest level of education that you have thus far achieved:
a) public school b) high school c) community college
d) business college e) university

Type of degree:
a) diploma b) certificate c) degree d) other _____

Employment (circle all that apply):
a) full time b) part time c) homemaker
d) unemployed e) retired f) student

1. Please provide the month and year in which the death occurred:
   Month _____
   Year _____

2. What age were you when the death occurred? _____

3. What is the sex of the deceased?
   Male ____
   Female ____

4. Please rate your degree of emotional closeness to the deceased by placing a vertical line at that point on the line below corresponding to your degree of closeness.

_____

0 1 2 3 4 5 6 7 8 9 10

Not close at all

Closest you have ever been to anybody

5. Was the death caused by:
   a) accident ____
   b) suicide ____
   c) AIDS ____
   d) other natural causes ____

Please elaborate on how the death occurred (i.e., method)_____

_____

_____

_____

_____

_____

_____

_____.

6. If the death was caused by a car accident, was the person alone in the car? Yes____
   No ____

7. Did *you* anticipate, or have advance warning, that the person would soon die?
   a) yes ____
   b) no ____

If yes, please explain the nature of the advance warning _____

_____

_____

_____

_____

_____

_____.

8. Do you perceive the death as having being preventable?
   a) yes ____
   b) no ____

If yes, please explain how you believe the death to have been preventable

_____

_____

_____

_____

_____

_____.

9. Did you discover the body? (first to discover the body)
   a) yes ____
   b) no ____

10. Did you witness the body at the death scene?
   a) yes ____
   b) no ____

11. If you did see the body at the death scene, how clearly does this memory stick in your mind?
   a) very clearly ____
   b) somewhat clearly ____
   c) not very clear at all ____
   d) can't remember anything about it ____

12. Do any of the following circumstances accurately describe your situation at the exact moment when the death occurred? (check if yes)

a) you actually witnessed (saw) the death happen _____
b) you heard the death happen, but did not see it _____

13. Have you ever asked yourself "Why me?"

a) yes _____
b) no _____

14. Have you ever asked yourself "why my _____ ?"

a) yes _____
b) no _____

If you answered yes to either of the two above questions, have you been able to find an acceptable answer to your questions?

a) yes _____
b) no _____

If you have found an answer that you can accept, please briefly describe the nature of your answer.

_____

_____

_____

_____

_____

_____

_____

_____.

15. Did you feel any sense of relief that the person had died?

a) yes _____
b) no _____

If yes, please describe the nature of your feelings of relief

_____

_____

_____

_____

_____.

16. To what extent do you feel that you have accepted the death?

0 1 2 3 4 5 6 7 8 9 10

have not accepted it at all — completely accepted it

17. To what extent do you feel that you have recovered from the death?

0 1 2 3 4 5 6 7 8 9 10

have not recovered at all — completely recovered

18. How attached, or close, do you still feel to the deceased, regardless of how long it has been since the death occurred?

0 1 2 3 4 5 6 7 8 9 10

not close at all — extremely close

19. If it has been at least one year since the death, to what degree do you get upset at that time of the year when the person died (on the day or week in which the death happened)?

0 1 2 3 4 5 6 7 8 9 10

not at all upset — extremely upset

20. Since the death, have you at any time thought about joining a bereavement support group to help you to deal with the death?
    a) yes ____
    b) no ____

21. Since the death, have you actually gone to at least one bereavement support group meeting?
    a) yes ____
    b) no ____
If yes, how many meetings did you attend? _____

22. Have you spoken to any professional (e.g., therapist, counsellor) to try to sort out your feelings regarding the death?
    a) yes ____
    b) no ____
If yes, to whom did you speak? _____ How many times? _____
(professional)

23. Have you had at least one person (non-professional) with whom you have been able to talk to about your feelings regarding the death?
    a) yes ____
    b) no ____

The next four questions refer only to those deaths that were of a suicidal nature. If the death that you mourned was not due to suicide, please go on to question number 28.

24. If the death was a suicide, did the person ever make a previous attempt?
    a) yes ____
    b) no ____

25. If the death was a suicide, was a note left?
    a) yes ____
    b) no ____

26. If a note was left, did you read it or otherwise learn of its' contents?
    a) yes ____
    b) no ____

27. Do you believe that you were blamed for the death in the suicide note?
    a) yes ____
    b) no ____

28. How many people, in total, have you known in your life that have died? _____ (including the person for whom you filled out the above questions)
29. Of these people, how many would you say that you had been close to? ____

What did you find most helpful following the death?

One Last Request!

As mentioned earlier in the Consent Form, a number of the questions that were asked of you were about very sensitive issues concerning very private information. The only way to find out more about these issues, however, is to ask about them; your participation is very much appreciated. Now, I would also like to know how you felt about answering these questions. Please respond to the few items below.

1. Has responding to the questions in this study made you upset in any way?

Yes _____
No _____

If you answered yes, please complete the following:

2. Do you have any regrets about participating in this study?

Yes _____
No _____

3. Is there someone that you can speak to about your feelings that were raised by these questions?

Yes _____
No _____

4. Do you think you might be willing to contact one of the agencies given to you on the handout?

Yes _____
No _____

Comments regarding anything about this study or your participation in it?

_____

_____

_____

_____

_____.

Thank you very much, and please do not hesitate to contact me should you have any comments or concerns that you would like to discuss.

Steven Marykuca, graduate student
Department of Psychology
University of Windsor

APPENDIX B

Consent Form

I, _____ (please print name), hereby understand and consent to the following.

I am participating in a study that is investigating bereavement and grief. This study is a masters thesis being conducted by Steve Marykuca, a graduate student here in the Department of Psychology at the University of Windsor. The study is being supervised by Dr. Michael Kral. In this study, I will be completing a series of questionnaires asking personal questions of me about the death of someone close to me that I have experienced and some of the reactions and feelings that I had in response to the death. Some of the questions ask about matters that may be potentially upsetting, many being related to death. The purpose of these questions is to learn about how the experiencing of a death subsequently affects those who knew the deceased.

I am aware that my participation is completely voluntary. I have the right to withdraw from participation at any time without explanation or penalty, and I may refrain from answering any questions. I may ask questions at any time during my participation, and Steve Marykuca, the principal investigator, will be available after I am finished for any further questions, comments, or discussion. Confidentiality regarding my responses will be protected by not having my name or any other identifying information appear on any of the questionnaires. The data obtained through my participation may, in the future, be used for publication purposes.

The questionnaire should take approximately one hour to complete, and I will receive one bonus point to be applied toward my final course grade as compensation for my participation in this study. A summary of the results can be obtained in about 10 months from Steve Marykuca.

This procedure and consent form have been reviewed and cleared by the University of Windsor's Department of Psychology Ethics Committee. Concerns may be directed to Dr. R. Frisch, Chair, Psychology Ethics Committee (253-4232 x7012). I have received a copy of this form and, although participation in this project is not intended to aid directly in resolving issues around bereavement, a list of university and community psychological/ bereavement resources is also attached.

_____

signature

_____

date

For information contact:
Steve Marykuca, graduate student
Department of Psychology
University of Windsor
Windsor, Ontario, N9B 3P4

OR

Michael Kral, Ph.D., C.Psych.
Department of Psychology
University of Windsor
(519) 253-4232 x2220

APPENDIX C

Bereavement resources/support groups and related services

CAMPUS AND COMMUNITY RESOURCES

On-Campus Resources

Psychological Services Center	973-7012 253-4232 ext. 7012
Office of Student Services	253-3410
(for students in residence)	Room 50, Vanier Hall
Campus Ministry	
various Christian Counsellors/Pastors,	253-4232 ext. 4512
one Jewish Rabbi	Univ. Center, 2nd floor
University Health Services	253-4232 ext. 7002 Univ. Center, 2nd floor
Health Educator (Judy Wilson)	253-4232 ext. 3260

Community Resources

Alive! Canada	
Suicide Prevention	252-9020
Canadian Mental Health Association	
"Bereaved Persons' Program,"	
Suicide Bereavement resources	255-7440
Distress Center (all crises)	256-5000
Windsor Western Hospital Crisis Program	
"Crisis assessment and Intervention Program"	257-5125

A few things about bereavement and grief:

Previous research has shown that people surviving the death of someone close to them typically experience many of the following:

-Struggling with questions of "why?" until you find that there may be some, but possibly no acceptable answer(s).

-Feelings of anger, guilt, fear, confusion, isolation.

-Feeling overwhelmed.

It is important to realize that a good listener can be a valuable resource as you try to come to terms with the meaning of the loss. Support groups can also be helpful. Moving on often means "letting go," but letting go does not mean forgetting. Finally, death often makes people look at life differently, which may lead to a rearrangement of one's priorities.

If the death was a suicide, remember, the choice was not yours. Feelings of guilt may be intense, but know that no one is ever the sole influence in another persons life.

APPENDIX D

Formulas Used to Calculate the Adjusted Mean Rank Values for the Mode of Death Groups

Step 1 - General Regression Equation from output:

$$Y = b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + a$$

where b_1 = unstandardized regression coefficient for closeness
x_1 = closeness
b_2 = unstandardized regression coefficient for preventability
x_2 = preventability
b_3 = unstandardized regression coefficient for age of deceased
x_3 = age of deceased
b_4 = unstandardized regression coefficient for time since death
x_4 = time since death
b_5 = unstandardized regression coefficient for the contrast
x_5 = contrast coefficient
a = constant

Step 2 - Calculation of adjusted Y intercept (A') incorporating the covariates:

$$A' = A' + b_1m_1 + b_2m_2 + b_3m_3 + b_4m_4$$

where A' = adjusted intercept
b = coefficient for the covariates
m = mean of the covariate

Step 3 - Calculation of the adjusted mean rank scale values ($\bar{Y}'$) for each group:

$$\bar{Y}'_h = b_5x_5 + A'$$

where$_h$ = group number
b_5 = coefficient for that particular contrast
x_5 = contrast coefficients for that particular group (i.e., 0, 1, -1etc.)

APPENDIX E

Regression Results: Contrasts of Suicide Versus All Other (Accident, Natural Anticipated, and Natural Unanticipated) Groups Across Outcome Variables

GEQ: Physical Reactions	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.23***	-26.68	-.26	-4.93***			
Age of deceased	.11*	-.36	-.09	-1.58			
Time since death	.20***	-.49	-.19	-3.68***			
Preventable	.13*	27.09	.14	2.40*	.13***		
Block 2 - contrast							
Suicide vs. all other	——	.55	.01	.12	.00	.13***	.11***

GEQ: General Grief Reactions	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.20***	-25.04	-.24	-4.60***			
Age of deceased	-.22***	-.73	-.18	-3.17**			
Time since death	-.10	-.27	-.11	-2.02*			
Preventable	.17**	18.62	.09	1.65	.12***		
Block 2 - contrast							
Suicide vs. all other	——	-5.94	-.07	-1.34	.00	.12***	.11***

GEQ: Search for Explanation	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.12*	-20.27	-.20	-4.29***			
Age of deceased	.49***	-1.58	-.40	-7.95***			
Time since death	.13*	-.40	-.16	-3.44***			
Preventable	.37***	42.53	.21	4.33***	.33***		
Block 2 - contrast							
Suicide vs. all other	——	-7.92	-.10	-2.05*	.01*	.34***	.33***

GEQ: Loss of Social Support	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.15**	-18.86	-.18	-3.36***			
Age of deceased	-.10	-.33	-.08	-1.40			
Time since death	-.08	-.20	-.08	-1.43			
Preventable	.06	3.36	.02	.29	.05**		
Block 2 - contrast							
Suicide vs. all other	——	-5.15	-.06	-1.12	.00	.05**	.03**

Note. Adj. = Adjusted

[a]Beta coefficients are from equation with all variables entered.

*p < .05, **p < .01, ***p < .001

GEQ: Stigmatization	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.10	-14.97	-.15	-2.75**			
Age of deceased	.23***	-.70	-.18	-3.08**			
Time since death	.03	.01	.00	.07			
Preventable	.16**	15.03	.08	.29	.08***		
Block 2 - contrast							
Suicide vs. all other	——	-5.15	-.06	-3.04**	.03**	.11***	.09***

GEQ: Guilt	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.06	-8.70	-.08	-1.49			
Age of deceased	-.01	-.01	-.00	-.03			
Time since death	-.21***	-.49	-.19	-3.42***			
Preventable	.05	12.01	.06	1.00	.04**		
Block 2 - contrast							
Suicide vs. all other	——	-1.09	-.06	-2.3	.00	.04*	.03*

GEQ: Responsibility	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.12*	-15.87	-.16	-2.96**			
Age of deceased	.06	.16	-.04	.69			
Time since death	.01	-.01	.00	-.04			
Preventable	.21***	39.39	.20	3.54***	.07***		
Block 2 - contrast							
Suicide vs. all other	——	-16.60	-.21	-3.79***	.04***	.11***	.09***

GEQ: Shame	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.05	-10.00	-.10	-1.81			
Age of deceased	-.19***	-.50	-.13	-2.13*			
Time since death	-.13*	-.37	-.14	-2.68**			
Preventable	.14**	17.10	.09	1.48	.07***		
Block 2 - contrast							
Suicide vs. all other	——	-13.74	-.10	-3.03**	.03**	.10***	.08***

Note. Adj. = Adjusted

[a]Beta coefficients are from equation with all variables entered.

*p < .05, **p < .01, ***p < .001

GEQ: Rejection	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.16**	-20.13	-.21	-4.17***			
Age of deceased	-.22***	-.48	-.13	-2.36*			
Time since death	.04	.03	.01	.22			
Preventable	.15**	7.64	.04	.77	.09***		
Block 2 - contrast							
Suicide vs. all other	——	-29.48	-.38	-7.46***	.14***	.22***	.21***

GEQ: Self Destructive Behavior	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.13*	-15.62	-.15	-2.88**			
Age of deceased	-.26***	-1.06	-.27	-4.66***			
Time since death	-.10	-.23	-.09	-1.72			
Preventable	.11*	5.95	.03	.53	.10***		
Block 2 - contrast							
Suicide vs. all other	——	2.46	.03	.55	.00	.10***	.09***

GEQ: "Unique" Reactions	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.03	-9.18	-.09	-1.99*			
Age of deceased	.43***	-1.02	-.26	-5.26***			
Time since death	.02	-.01	-.01	-.12			
Preventable	.42***	49.77	.25	5.17***	.26***		
Block 2 - contrast							
Suicide vs. all other	——	-26.92	-.33	-7.13***	.10***	.36***	.35***

GEQ: Total scale score	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.18**	-25.48	-.24	-4.89***			
Age of deceased	-.33***	-1.04	-.26	-4.75***			
Time since death	-.14*	-.35	-.13	-2.73**			
Preventable	.25***	27.73	.14	2.56*	.19***		
Block 2 - contrast							
Suicide vs. all other	——	-15.38	-.18	-3.59***	.03***	.23***	.21***

Note. Adj. = Adjusted

[a]Beta coefficients are from equation with all variables entered.

*p < .05, **p < .01, ***p < .001

IES: Avoidance	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.04	-8.72	-.08	-1.55			
Age of deceased	-.10	-.19	-.05	-.82			
Time since death	-.23***	-.63	-.24	-4.54***			
Preventable	.11*	19.48	.10	1.67	.08***		
Block 2 - contrast							
Suicide vs. all other	——	4.11	-.05	-.89	.00	.08***	.07***

IES: Intrusions	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.19***	-25.91	-.25	-4.77***			
Age of deceased	-.18**	-.50	-.12	-2.18*			
Time since death	-.17**	-.50	-.19	-3.75***			
Preventable	.18**	30.42	.15	2.70***	.14***		
Block 2 - contrast							
Suicide vs. all other	——	-4.63	-.06	-1.04	.00	.14***	.13***

TRIG: Past Behaviors	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.38***	-44.24	-.43	-8.80***			
Age of deceased	-.24***	-.90	-.23	-4.26***			
Time since death	-.03	-.09	-.04	-.75			
Preventable	.16**	15.82	.08	1.51	.24***		
Block 2 - contrast							
Suicide vs. all other	——	-6.45	-.08	-1.56	.01	.25***	.23***

TRIG: Present Feelings	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.34***	-40.54	-.39	-8.00***			
Age of deceased	-.24***	-.88	-.22	-4.10***			
Time since death	-.20***	-.55	-.21	-4.38***			
Preventable	.19***	24.59	.12	2.34*	.26***		
Block 2 - contrast							
Suicide vs. all other	——	-2.83	-.03	-.69	.00	.26***	.25***

Note. Adj. = Adjusted

[a]Beta coefficients are from equation with all variables entered.

*p < .05, **p < .01, ***p < .001

Acceptance	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.10	15.54	.15	2.86**			
Age of deceased	.22***	.65	.16	2.86**			
Time since death	.18**	.52	.20	3.83***			
Preventable	-.24***	-34.19	-.17	-3.03**	.13***		
Block 2 - contrast							
Suicide vs. all other	——	1.19	.01	.27	.00	.13***	.12***

Recovery	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.22***	27.02	.26	4.93***			
Age of deceased	.15**	.47	.13	2.29*			
Time since death	.17**	.53	.10	3.43***			
Preventable	-.13*	-19.52	-.10	-1.71	.12***		
Block 2 - contrast							
Suicide vs. all other	——	1.59	.02	.35	.00	.12***	.11***

Note. Adj. = Adjusted
[a]Beta coefficients are from equation with all variables entered.
*$p < .05$, **$p < .01$, ***$p < .001$

APPENDIX F

Regression Results: Contrasts of Unnatural (Suicide and Accident) Versus Natural (Anticipated and Unanticipated) Groups across Outcome Variables

GEQ: Physical Reactions	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.23***	-25.42	-.25	-4.62***			
Age of deceased	.11*	-.54	-.14	-2.02*			
Time since death	.20***	-.50	-.20	-3.75***			
Preventable	.13*	30.35	.15	2.63**	.13***		
Block 2 - contrast							
Unnatural vs. natural	——	-9.74	.01	-1.25	.00	.13***	.12***

GEQ: General Grief Reactions	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.20***	-22.92	-.22	-4.15***			
Age of deceased	-.22***	-1.00	-.25	-3.75***			
Time since death	-.10	-.28	-.11	-2.06*			
Preventable	.17**	23.94	.12	2.07*	.12***		
Block 2 - contrast							
Unnatural vs. natural	——	-11.87	-.07	-1.49	.01	.12***	.11***

GEQ: Search for Explanation	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.12*	-19.23	-.19	-3.98***			
Age of deceased	.49***	-1.70	-.43	-7.26***			
Time since death	.13*	-.40	-.16	-3.39***			
Preventable	.37***	45.10	.23	4.46***	.33***		
Block 2 - contrast							
Unnatural vs. natural	——	-2.07	-.02	-.30	.00	.33***	.32***

GEQ: Loss of Social Support	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.15**	-18.60	-.18	-3.26**			
Age of deceased	-.10	-.35	-.09	-1.27			
Time since death	-.08	-.19	-.08	-1.39			
Preventable	.06	3.99	.02	.33	.05**		
Block 2 - contrast							
Unnatural vs. natural	——	1.72	.02	.21	.00	.03*	.03**

Note. Adj. = Adjusted

[a]Beta coefficients are from equation with all variables entered.

*$p < .05$, **$p < .01$, ***$p < .001$

GEQ: Stigmatization	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.10	-14.39	-.14	-2.57*			
Age of deceased	.23***	-.73	-.19	-2.72**			
Time since death	.03	.02	.01	.17			
Preventable	.16**	16.32	.08	.29	.08***		
Block 2 - contrast							
Unnatural vs. natural	——	5.51	.05	.70	.00	.08***	.07***

GEQ: Guilt	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.06	-6.16	-.06	-1.04			
Age of deceased	-.01	-.33	-.08	-1.17			
Time since death	-.21***	-.50	-.19	-3.53***			
Preventable	.05	18.05	.09	1.47	.04**		
Block 2 - contrast							
Unnatural vs. natural	——	-16.64	-.15	-2.0*	.01*	.06**	.04**

GEQ: Responsibility	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.12*	13.01	-.13	-2.35*			
Age of deceased	.06	-.20	-.05	.73			
Time since death	.01	-.00	.00	-.01			
Preventable	.21***	46.53	.24	4.00***	.07***		
Block 2 - contrast							
Unnatural vs. natural	——	-9.44	-.09	-1.20	.00	.07***	.06***

GEQ: Shame	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.05	-8.86	-.09	-1.55			
Age of deceased	-.19***	-.62	-.16	-2.22*			
Time since death	-.13*	-.36	-.14	-2.56*			
Preventable	.14**	19.88	.10	1.66	.07***		
Block 2 - contrast							
Unnatural vs. natural	——	1.31	.01	.16	.00	.07***	.06***

Note. Adj. = Adjusted

[a]Beta coefficients are from equation with all variables entered.

*p < .05, **p < .01, ***p < .001

GEQ: Rejection	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.16**	-20.13	-.21	-3.84***			
Age of deceased	-.22***	-.39	-.11	-1.55			
Time since death	.04	.06	.03	.50			
Preventable	.15**	7.47	.04	.68	.09***		
Block 2 - contrast							
Unnatural vs. natural	-----	20.91	.20	2.81**	.02**	.11***	.10***

GEQ: Self Destructive Behavior	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.13*	-15.00	-.15	-2.73**			
Age of deceased	-.26***	-1.16	-.30	-4.33***			
Time since death	-.10	-.24	-.09	-1.77			
Preventable	.11*	7.54	.04	.65	.10***		
Block 2 - contrast							
Unnatural vs. natural	-----	-6.34	-.06	-.81	.00	.10***	.09***

GEQ: "Unique" Reactions	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.03	-9.93	-.10	-2.00*			
Age of deceased	.43***	-.84	-.21	-3.49***			
Time since death	.02	.03	.01	.21			
Preventable	.42***	47.63	.24	4.58***	.26***		
Block 2 - contrast							
Unnatural vs. natural	-----	24.71	.22	3.52***	.03***	.29***	.28***

GEQ: Total scale score	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.18**	-23.92	-.23	-4.43***			
Age of deceased	-.33***	-1.21	-.30	-4.61***			
Time since death	-.14*	-.34	-.13	-2.60**			
Preventable	.25***	31.65	.15	2.80**	.19***		
Block 2 - contrast							
Unnatural vs. natural	-----	-.72	-.01	-.09	.00	.19***	.18***

Note. Adj. = Adjusted

[a]Beta coefficients are from equation with all variables entered.

*p < .05, **p < .01, ***p < .001

IES: Avoidance	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.04	-6.24	-.06	-1.10			
Age of deceased	-.10	-.53	-.13	-1.92			
Time since death	-.23***	-.64	-.25	-4.63***			
Preventable	.11*	25.85	.13	2.17*	.08***		
Block 2 - contrast							
Unnatural vs. natural	——	-15.52	-.14	-1.92	.01	.09***	.08***

IES: Intrusions	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.19***	-25.19	-.24	-4.56***			
Age of deceased	-.18**	-.58	-.15	-2.18*			
Time since death	-.17**	-.50	-.19	-3.73***			
Preventable	.18**	32.24	.16	2.79**	.14***		
Block 2 - contrast							
Unnatural vs. natural	——	-2.06	-.02	-.26	.00	.14***	.13***

TRIG: Past Behaviors	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.38***	-44.13	-.43	-8.62***			
Age of deceased	-.24***	-.90	-.23	-3.60***			
Time since death	-.03	-.09	-.03	-.68			
Preventable	.16**	16.05	.08	1.50	.24***		
Block 2 - contrast							
Unnatural vs. natural	——	3.80	-.03	.52	.00	.24***	.23***

TRIG: Present Feelings	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.34***	-39.26	-.38	-7.68***			
Age of deceased	-.24***	-1.06	-.27	-4.25***			
Time since death	-.20***	-.56	-.22	-4.45***			
Preventable	.19***	27.98	.14	2.60**	.26***		
Block 2 - contrast							
Unnatural vs. natural	——	-8.07	-.07	-1.11	.00	.26***	.25***

Note. Adj. = Adjusted

[a]Beta coefficients are from equation with all variables entered.

*$p < .05$, **$p < .01$, ***$p < .001$

Acceptance	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.10	14.13	.14	2.57*			
Age of deceased	.22***	.85	.21	3.17**			
Time since death	.18**	.52	.20	3.89***			
Preventable	-.24***	-37.83	-.19	-3.28**	.13***		
Block 2 - contrast							
Unnatural vs. natural	——	9.66	.09	1.24	.00	.13***	.12***

Recovery	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.22***	25.75	.25	4.63***			
Age of deceased	.15**	.70	.17	2.60**			
Time since death	.17**	.47	.18	3.48***			
Preventable	-.13*	-22.79	-.11	-1.96	.12***		
Block 2 - contrast							
Unnatural vs. natural	——	8.35	.07	1.06	.00	.13***	.11***

Note. Adj. = Adjusted

[a]Beta coefficients are from equation with all variables entered.

*$p < .05$, **$p < .01$, ***$p < .001$

APPENDIX G

Regression Results: Contrasts of Unanticipated (Suicide, Accident, and Natural Unanticipated) Versus Anticipated (Natural) Groups Across Outcome Variables

GEQ: Physical Reactions	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.23***	-26.59	-.26	-4.92***			
Age of deceased	.11*	-.43	-.11	-1.79			
Time since death	.20***	-.50	-.19	-3.70***			
Preventable	.13*	28.36	.14	2.50*	.13***		
Block 2 - contrast							
Unanticipated vs. anticipated	——	-2.51	-.05	-.85	.00	.13***	.11***

GEQ: General Grief Reactions	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.20***	-24.56	-.24	-4.52***			
Age of deceased	-.22***	-.74	-.19	-3.05**			
Time since death	-.10	-.27	-.10	-1.97*			
Preventable	.17**	19.07	.10	1.67	.12***		
Block 2 - contrast							
Unanticipated vs. anticipated	——	1.72	.03	.56	.00	.12***	.11***

GEQ: Search for Explanation	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.12*	-19.84	-.19	-4.23***			
Age of deceased	.49***	-1.46	-.37	-7.03***			
Time since death	.13*	-.39	-.15	-3.37***			
Preventable	.37***	40.75	.20	4.14***	.33***		
Block 2 - contrast							
Unanticipated vs. anticipated	——	6.59	-.13	2.57*	.01*	.35***	.34***

GEQ: Loss of Social Support	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.15**	-18.52	-.18	-3.30**			
Age of deceased	-.10	-.30	-.08	-1.21			
Time since death	-.08	-.19	-.08	-1.39			
Preventable	.06	3.01	.02	.26	.05**		
Block 2 - contrast							
Unanticipated vs. anticipated	——	2.84	.06	.93	.00	.05**	.03**

Note. Adj. = Adjusted

[a]Beta coefficients are from equation with all variables entered.

*p < .05, **p < .01, ***p < .001

GEQ: Stigmatization	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.10	-14.00	-.14	-2.56*			
Age of deceased	.23***	-.68	-.17	-2.81**			
Time since death	.03	.02	.01	.17			
Preventable	.16**	15.21	.08	1.34	.08***		
Block 2 - contrast							
Unanticipated vs. anticipated	——	5.35	.11	1.80	.01	.09***	.08***

GEQ: Guilt	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.06	-8.50	-.08	-1.46			
Age of deceased	-.01	-.05	-.01	-.21			
Time since death	-.21***	-.49	-.19	-3.42***			
Preventable	.05	12.94	.06	1.07	.04**		
Block 2 - contrast							
Unanticipated vs. anticipated	——	-1.20	-.02	-3.8	.00	.04*	.03*

GEQ: Responsibility	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.12*	-14.29	-.14	-2.62**			
Age of deceased	.06	-.02	-.00	-.07			
Time since death	.01	.01	.00	.05			
Preventable	.21***	43.25	.22	3.78***	.07***		
Block 2 - contrast							
Unanticipated vs. anticipated	——	.09	.00	.03	.00	.07***	.05***

GEQ: Shame	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.05	-8.73	-.08	-1.56			
Age of deceased	-.19***	-.61	-.15	-2.47*			
Time since death	-.13*	-.36	-.14	-2.57*			
Preventable	.14**	19.86	.10	1.69	.07***		
Block 2 - contrast							
Unanticipated vs. anticipated	——	.86	.02	.28	.00	.07***	.06***

Note. Adj. = Adjusted

[a]Beta coefficients are from equation with all variables entered.

*p < .05, **p < .01, ***p < .001

GEQ: Rejection	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.16**	-17.58	-.18	-3.39***			
Age of deceased	-.22***	-.63	-.17	-2.73*			
Time since death	.04	.05	.02	.39			
Preventable	.15**	11.69	.06	1.07	.09***		
Block 2 - contrast							
Unanticipated vs. anticipated	——	5.32	-.11	1.88	.01	.10***	.08***

GEQ: Self Destructive Behavior	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.13*	-15.94	-.16	-2.95**			
Age of deceased	-.26***	-.99	-.25	-4.11***			
Time since death	-.10	-.23	-.09	-1.72			
Preventable	.11*	4.47	.02	.40	.10***		
Block 2 - contrast				.55			
Unanticipated vs. anticipated	——	1.63	.03		.00	.10***	.09***

GEQ: "Unique" Reactions	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.03	-7.10	-.07	-1.46			
Age of deceased	.43***	-1.04	-.26	-4.80***			
Time since death	.02	.01	.00	.08			
Preventable	.42***	51.47	.26	5.02***	.26***		
Block 2 - contrast							
Unanticipated vs. anticipated	——	8.75	.18	3.29**	.03**	.28***	.27***

GEQ: Total scale score	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.18**	-24.30	-.23	-4.61***			
Age of deceased	-.33***	-1.05	-.26	-4.48***			
Time since death	-.14*	-.34	-.13	-2.58*			
Preventable	.25***	28.62	.14	2.59*	.19***		
Block 2 - contrast							
Unanticipated vs. anticipated	——	5.01	.10	1.74	.01	.20***	.19***

Note. Adj. = Adjusted

[a]Beta coefficients are from equation with all variables entered.

*p < .05, **p < .01, ***p < .001

IES: Avoidance	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.04	-8.49	-.08	-1.51			
Age of deceased	-.10	-.15	-.04	-.60			
Time since death	-.23***	-.63	-.24	-4.50***			
Preventable	.11*	18.86	.09	1.61	.08***		
Block 2 - contrast							
Unanticipated vs. anticipated	——	2.87	.06	.94	.00	.08***	.07***

IES: Intrusions	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.19***	25.73	-.25	-4.76***			
Age of deceased	-.18**	-.41	-.10	-1.70			
Time since death	-.17**	-.50	-.19	-3.71***			
Preventable	.18**	28.97	.14	2.56*	.14***		
Block 2 - contrast							
Unanticipated vs. anticipated	——	4.61	.09	1.56	.01	.15***	.13***

TRIG: Past Behaviors	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.38***	-43.91	-.43	-8.75***			
Age of deceased	-.24***	-.83	-.21	-3.74***			
Time since death	-.03	-.09	-.03	-.66			
Preventable	.16**	15.08	.08	1.43	.24***		
Block 2 - contrast							
Unanticipated vs. anticipated	——	4.40	.09	1.60	.01	.25***	.23***

TRIG: Present Feelings	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.34***	-40.38	-.39	-8.01***			
Age of deceased	-.24***	-.82	-.21	-3.66***			
Time since death	-.20***	-.54	-.21	-4.37***			
Preventable	.19***	23.44	.12	2.21*	.26***		
Block 2 - contrast							
Unanticipated vs. anticipated	——	3.07	.06	1.13	.00	.26***	.25***

Note. Adj. = Adjusted

[a]Beta coefficients are from equation with all variables entered.

*p < .05, **p < .01, ***p < .001

Acceptance	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.10	15.64	.15	2.90**			
Age of deceased	.22***	.55	.14	2.28*			
Time since death	.18**	.51	.20	3.81***			
Preventable	-.24***	-32.28	-.16	-2.85**	.13***		
Block 2 - contrast							
Unanticipated vs. anticipated	——	-3.96	-.08	-1.34	.00	.13***	.12***

Recovery	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.22***	27.11	.26	4.93***			
Age of deceased	.15**	.41	.10	1.69			
Time since death	.17**	.46	.17	3.41***			
Preventable	-.13*	-17.43	-.09	-1.53	.12***		
Block 2 - contrast							
Unanticipated vs. anticipated	——	-4.44	-.09	-1.50	.01	.13***	.11***

Note. Adj. = Adjusted
[a]Beta coefficients are from equation with all variables entered.
*$p < .05$, **$p < .01$, ***$p < .001$

APPENDIX H

Regression Results with Suicide Survivors Removed from Analysis: Contrasts of Unnatural (Accident only) Versus Natural (Anticipated and Unanticipated) Groups Across Outcome Variables

GEQ: Physical Reactions	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.23***	-25.46	-.25	-4.65***			
Age of deceased	.11*	-.54	-.14	-2.08*			
Time since death	.20***	-.51	-.20	-3.79***			
Preventable	.13*	30.29	.15	2.64**	.13***		
Block 2-contrast-suicide excepted							
Unnatural vs. natural	——	8.27	.09	1.37	.00	.13***	.12***

GEQ: General Grief Reactions	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.20***	-22.02	-.21	-4.03***			
Age of deceased	-.22***	-1.15	-.29	-4.40***			
Time since death	-.10	-.29	-.11	-2.19*			
Preventable	.17**	26.28	.13	2.30*	.12***		
Block 2-contrast-suicide excepted							
Unnatural vs. natural	——	15.85	.18	2.65**	.02**	.14***	.12***

GEQ: Search for Explanation	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.12*	-18.08	-.18	-3.78***			
Age of deceased	.49***	-1.87	-.47	-8.17***			
Time since death	.13*	-.41	-.16	-3.51***			
Preventable	.37***	48.04	.24	4.79***	.33***		
Block 2-contrast-suicide excepted							
Unnatural vs. natural	——	9.21	.10	1.75	.01	.34***	.33***

GEQ: Loss of Social Support	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.15**	-17.87	-.18	-3.14**			
Age of deceased	-.10	-.46	-.12	-1.69			
Time since death	-.08	-.20	-.08	-1.43			
Preventable	.06	5.85	.03	.49	.05**		
Block 2-contrast-suicide excepted							
Unnatural vs. natural	——	3.22	.04	.51	.00	.05**	.03**

Note. Adj. = Adjusted

[a]Beta coefficients are from equation with all variables entered.

*p < .05, **p < .01, ***p < .001

GEQ: Stigmatization	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.10	12.31	-.12	-2.21*			
Age of deceased	.23***	-1.01	-.26	-3.83***			
Time since death	.03	.01	.00	.05			
Preventable	.16**	21.29	.11	1.84	.03***		
Block 2-contrast-suicide excepted							
Unnatural vs. natural	——	7.60	-.09	1.24	.00	.09***	.07***

GEQ: Guilt	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.06	-5.92	-.06	-1.01			
Age of deceased	-.01	-.39	-.10	-1.39			
Time since death	-.21***	-.51	-.20	-3.62***			
Preventable	.05	18.68	.09	1.54	.04**		
Block 2-contrast-suicide excepted							
Unnatural vs. natural	——	15.97	.18	2.49*	.02*	.06**	.05**

GEQ: Responsibility	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.12*	-10.59	-.11	-1.96			
Age of deceased	.06	-.57	-.15	-2.20			
Time since death	.01	-.03	-.01	-.25			
Preventable	.21***	52.75	.27	4.66***	.07***		
Block 2-contrast-suicide excepted							
Unnatural vs. natural	——	23.90	.28	4.02***	.05***	.11***	.10***

GEQ: Shame	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.05	-6.90	-.07	-1.22			
Age of deceased	-.19***	-.91	-.23	-3.35***			
Time since death	-.13*	-.38	-.15	-2.72**			
Preventable	.14**	24.90	.12	2.10*	.07***		
Block 2-contrast-suicide excepted							
Unnatural vs. natural	——	11.56	.13	1.86	.01	.08***	.07

Note. Adj. = Adjusted

[a]Beta coefficients are from equation with all variables entered.

*p < .05, **p < .01, ***p < .001

GEQ: Rejection	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.16**	-16.00	-.16	-3.03**			
Age of deceased	-.22***	-.98	-.26	-3.90***			
Time since death	.04	.03	.01	.25			
Preventable	.15**	17.98	.10	1.63	.09***		
Block 2-contrast-suicide excepted							
Unnatural vs. natural	——	8.50	.10	1.46	.01	.09***	.08***

GEQ: Self Destructive Behavior	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.13*	-15.32	-.15	-2.79**			
Age of deceased	-.26***	-1.11	-.29	-4.24***			
Time since death	-.10	-.24	-.09	-1.77			
Preventable	.11*	6.73	.03	.59	.10***		
Block 2-contrast-suicide excepted							
Unnatural vs. natural	——	3.44	.04	.57	.00	.10***	.09***

GEQ: "Unique" Reactions	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.03	-6.20	-.06	-1.23			
Age of deceased	.43***	-1.37	-.35	-5.67***			
Time since death	.02	-.00	-.00	-.00			
Preventable	.42***	57.27	.29	5.43***	.26***		
Block 2-contrast-suicide excepted							
Unnatural vs. natural	——	2.73	.03	.49	.00	.26***	.25***

GEQ: Total scale score	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.18**	-21.74	-.21	-4.09***			
Age of deceased	-.33***	-1.54	-.38	-6.05***			
Time since death	-.14*	-.37	-.14	-2.80**			
Preventable	.25***	37.39	.18	3.36***	.19***		
Block 2-contrast-suicide excepted							
Unnatural vs. natural	——	14.90	.16	2.53***	.02*	.21***	.20***

Note. Adj. = Adjusted

[a]Beta coefficients are from equation with all variables entered.

*p < .05, **p < .01, ***p < .001

IES: Avoidance	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.04	-5.60	-.05	-1.00			
Age of deceased	-.10	-.64	-.16	-2.39*			
Time since death	-.23***	-.66	-.25	-4.77***			
Preventable	.11*	27.61	.14	2.35*	.08***		
Block 2-contrast-suicide excepted							
Unnatural vs. natural	——	17.80	.20	2.86**	.02**	.10***	.09***

IES: Intrusions	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.19***	-24.53	-.24	-4.47***			
Age of deceased	-.18**	-.69	-.17	-2.61*			
Time since death	-.17**	-.51	-.20	-3.79***			
Preventable	.18**	34.00	.17	2.96**	.14***		
Block 2-contrast-suicide excepted							
Unnatural vs. natural	——	6.15	.07	1.01	.00	.14***	.13***

TRIG: Past Behaviors	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.38***	-43.25	-.42	-8.47***			
Age of deceased	-.24***	-1.02	-.26	-4.19***			
Time since death	-.03	-.09	-.04	-.73			
Preventable	.16**	18.45	.09	1.72	.24***		
Block 2-contrast-suicide excepted							
Unnatural vs. natural	——	2.56	.03	.45	.00	.24***	.23***

TRIG: Present Feelings	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.34***	-38.93	-.38	-7.67***			
Age of deceased	-.24***	-1.14	-.29	-4.65***			
Time since death	-.20***	-.57	-.22	-4.54***			
Preventable	.19***	29.23	.15	2.74**	.26***		
Block 2-contrast-suicide excepted							
Unnatural vs. natural	——	10.10	.11	1.78	.01	.26***	.25***

Note. Adj. = Adjusted

[a]Beta coefficients are from equation with all variables entered.

*p < .05, **p < .01, ***p < .001

Acceptance	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.10	13.93	.13	2.55*			
Age of deceased	.22***	.89	.22	3.40***			
Time since death	.18**	.53	.21	3.97***			
Preventable	-.24***	-38.42	-.19	-3.36***	.13***		
Block 2-contrast-suicide excepted							
Unnatural vs. natural	———	-9.80	.11	-1.62	.01	.14***	.12***

Recovery	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.22***	25.49	.25	4.61***			
Age of deceased	.15**	.75	.19	2.83**			
Time since death	.17**	.48	.18	3.53***			
Preventable	-.13*	-23.51	-.12	-2.03*	.12***		
Block 2-contrast-suicide excepted							
Unnatural vs. natural	———	-8.99	-.10	-1.47	.01	.13***	.11***

Note. Adj. = Adjusted
[a]Beta coefficients are from equation with all variables entered.
*p < .05, **p < .01, ***p < .001

APPENDIX I

Regression Results with Suicide Survivors Removed From Analysis: Contrasts of Unanticipated (Accident and Natural Anticipated) Versus Anticipated (Natural) Groups Across Outcome Variables

GEQ: Physical Reactions	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.23***	26.67	-.26	-4.93***			
Age of deceased	.11*	-.42	-.11	-1.78			
Time since death	.20***	-.50	-.19	-3.71***			
Preventable	.13*	28.17	.14	2.49*	.13***		
Block 2-contrast-suicide excepted							
Unanticipated vs. anticipated	——	-3.37	-.05	-.84	.00	.13***	.11***

GEQ: General Grief Reactions	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.20***	-24.49	-.24	-4.50***			
Age of deceased	-.22***	-.76	-.19	-3.21**			
Time since death	-.10	-.27	-.10	-1.98*			
Preventable	.17**	19.60	.10	1.72	.12***		
Block 2-contrast-suicide excepted							
Unanticipated vs. anticipated	——	1.17	.02	.29	.00	.12***	.10***

GEQ: Search for Explanation	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.12*	-19.62	-.19	-4.17***			
Age of deceased	.49***	-1.51	-.38	-7.33***			
Time since death	.13*	-.39	-.15	-3.35***			
Preventable	.37***	41.72	.21	4.23***	.33***		
Block 2-contrast-suicide excepted							
Unanticipated vs. anticipated	——	7.53	.11	2.15*	.01*	.34***	.33***

GEQ: Loss of Social Support	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.15**	-18.41	-.18	-3.28**			
Age of deceased	-.10	-.33	-.08	-1.34			
Time since death	-.08	-.19	-.08	-1.39			
Preventable	.06	3.55	.02	.30	.05**		
Block 2-contrast-suicide excepted							
Unanticipated vs. anticipated	——	2.88	.04	.69	.00	.05**	.03**

Note. Adj. = Adjusted

[a]Beta coefficients are from equation with all variables entered.

*p < .05, **p < .01, ***p < .001

GEQ: Stigmatization	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.10	-13.72	-.13	-2.50*			
Age of deceased	.23***	-.74	-.19	-3.12**			
Time since death	.03	.02	.01	.16			
Preventable	.16**	16.54	.08	1.45	.08***		
Block 2-contrast-suicide excepted							
Unanticipated vs. anticipated	-----	4.64	.07	1.15	.00	.09***	.07***

GEQ: Guilt	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.06	-8.53	-.08	-1.47			
Age of deceased	-.01	-.06	-.01	-.22			
Time since death	-.21***	-.49	-.19	-3.42***			
Preventable	.05	12.95	.06	1.07	.04**		
Block 2-contrast-suicide excepted							
Unanticipated vs. anticipated	-----	-1.89	-.03	-.44	.00	.04*	.03*

GEQ: Responsibility	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.12*	-14.23	-.14	-2.61**			
Age of deceased	.06	-.08	-.02	.35			
Time since death	.01	.00	.00	.03			
Preventable	.21***	44.46	.23	3.89***	.07***		
Block 2-contrast-suicide excepted							
Unanticipated vs. anticipated	-----	-3.28	-.05	-.81	.00	.07***	.05***

GEQ: Shame	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.05	-8.66	-.08	-1.55			
Age of deceased	-.19***	-.67	-.17	-2.74**			
Time since death	-.13*	-.36	-.14	-2.58*			
Preventable	.14**	20.91	.10	1.78	.07***		
Block 2-contrast-suicide excepted							
Unanticipated vs. anticipated	-----	-1.62	-.02	-.39	.00	.07***	.06***

Note. Adj. = Adjusted

[a]Beta coefficients are from equation with all variables entered.

*p < .05, **p < .01, ***p < .001

GEQ: Rejection	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.16**	-17.33	-.18	-3.32**			
Age of deceased	-.22***	-.76	-.20	-3.34**			
Time since death	.04	.05	.02	.36			
Preventable	.15**	14.14	.08	1.30	.09***		
Block 2-contrast-suicide excepted							
Unanticipated vs. anticipated	——	1.35	.02	.39	.00	.09***	.07***

GEQ: Self Destructive Behavior	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.13*	-15.89	-.16	-2.94**			
Age of deceased	-.26***	-.98	-.25	-4.14***			
Time since death	-.10	-.23	-.09	-1.72			
Preventable	.11*	4.39	.02	.39	.10***		
Block 2-contrast-suicide excepted							
Unanticipated vs. anticipated	——	2.76	.04	.69	.00	.10***	.09***

GEQ: "Unique" Reactions	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.03	-6.74	-.07	-1.37			
Age of deceased	.43***	-1.17	-.30	-5.41***			
Time since death	.02	.01	.00	.07			
Preventable	.42***	53.90	.27	5.21***	.26***		
Block 2-contrast-suicide excepted							
Unanticipated vs. anticipated	——	6.63	.09	1.80	.01	.27***	.26***

GEQ: Total scale score	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.18**	-24.09	-.23	-4.55***			
Age of deceased	-.33***	-1.12	-.28	-4.85***			
Time since death	-.14*	-.34	-.13	-2.58*			
Preventable	.25***	30.03	.15	2.72**	.19***		
Block 2-contrast-suicide excepted							
Unanticipated vs. anticipated	——	3.82	.05	.97	.00	.20***	.18***

Note. Adj. = Adjusted

[a]Beta coefficients are from equation with all variables entered.

*p < .05, **p < .01, ***p < .001

IES: Avoidance	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.04	-8.39	-.08	-1.50			
Age of deceased	-.10	-.17	-.04	-.70			
Time since death	-.23***	-.63	-.24	-4.50***			
Preventable	.11*	19.33	.10	1.65	.08***		
Block 2-contrast-suicide excepted							
Unanticipated vs. anticipated	——	3.15	.04	.76	.00	.08***	.07***

IES: Intrusions	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.19***	-25.57	-.25	-4.73***			
Age of deceased	-.18**	-.44	-.11	-1.84			
Time since death	-.17**	-.50	-.19	-3.70***			
Preventable	.18**	29.58	.15	2.61**	.14***		
Block 2-contrast-suicide excepted							
Unanticipated vs. anticipated	——	5.45	.07	1.36	.00	.14***	.13***

TRIG: Past Behaviors	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.38***	-43.75	-.43	-8.71***			
Age of deceased	-.24***	-.87	-.22	-3.95***			
Time since death	-.03	-.08	-.03	-.66			
Preventable	.16**	15.79	.08	1.50	.24***		
Block 2-contrast-suicide excepted							
Unanticipated vs. anticipated	——	4.80	.07	1.28	.00	.24***	.23***

TRIG: Present Feelings	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.34***	-40.27	-.39	-8.00***			
Age of deceased	-.24***	-.84	-.21	-3.80***			
Time since death	-.20***	-.54	-.21	-4.36***			
Preventable	.19***	23.82	.12	2.26*	.26***		
Block 2-contrast-suicide excepted							
Unanticipated vs. anticipated	——	3.70	.05	1.00	.00	.26***	.25***

Note. Adj. = Adjusted

[a]Beta coefficients are from equation with all variables entered.

*p < .05, **p < .01, ***p < .001

Acceptance	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.10	15.52	.15	2.87**			
Age of deceased	.22***	.56	.14	2.37*			
Time since death	.18**	.51	.20	3.81***			
Preventable	-.24***	-32.60	-.16	-2.89**	.13***		
Block 2-contrast-suicide excepted							
Unanticipated vs. anticipated	——	-5.26	-.08	-1.31	.01	.13***	.12***

Recovery	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.22***	26.97	.26	4.95***			
Age of deceased	.15**	.43	.11	1.78			
Time since death	.17**	.46	.18	3.40***			
Preventable	-.13*	-17.80	-.09	-1.56	.12***		
Block 2-contrast-suicide excepted							
Unanticipated vs. anticipated	——	-5.85	-.08	-1.45	.01	.13***	.11***

Note. Adj. = Adjusted
[a]Beta coefficients are from equation with all variables entered.
*$p < .05$, **$p < .01$, ***$p < .001$

APPENDIX J

Regression Results: Contrasts of Suicide Versus Natural Death (Anticipated and Unanticipated) Survivors on the Responsibility and Total Grief Scales of the Grief Experience Questionnaire

GEQ: Responsibility	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	.12*	-15.92	-.16	-2.91**			
Age of deceased	.06	.19	.05	.78			
Time since death	.01	.01	.00	.06			
Preventable	.21***	39.21	.20	3.44***	.07***		
Block 2 - contrast							
Suicide vs. natural	———	14.18	.13	2.21*	.01*	.08***	.07***

GEQ: Total scale score	*r*	B	Beta[a]	T	ΔR^2	Total R^2	Adj. R^2
Block 1							
Closeness	-.18**	-25.83	-.25	-4.88***			
Age of deceased	-.33***	-.97	-.24	-4.13***			
Time since death	-.14*	-.34	-.13	-2.61*			
Preventable	.25***	26.76	.13	2.43*	.19***		
Block 2 - contrast							
Suicide vs. natural	———	15.85	.15	2.54*	.02*	.21***	.20***

Note. Adj. = Adjusted

[a]Beta coefficients are from equation with all variables entered.

*p < .05, **p < .01, ***p < .001

APPENDIX K

Means and Standard Deviations for the Five Component Questions of the Unique Reactions Subscale of the Grief Experiences Questionnaire

	Mode of death			
	Suicide	Accident	NA[a]	NU[b]
Question:	M (SD)	M (SD)	M (SD)	M (SD)
Since the death, how often did you:				
1. ...wonder about the person's motivation for not living longer?	**3.85** (1.10)	1.19 (0.55)	1.46 (0.86)	1.52 (0.90)
2. ...feel like the person was somehow getting even with you by dying?	1.21 (0.48)	1.09 (0.54)	1.03 (0.16)	1.13 (0.39)
3. ...feel that you should have somehow prevented the death?	**2.82** (1.55)	1.71 (1.08)	1.36 (0.81)	1.60 (1.04)
4. ...tell someone that the cause of death was something different than what it really was?	**1.88** (1.30)	1.26 (0.65)	1.13 (0.48)	1.28 (0.81)
5. ...feel that the death was a senseless and wasteful loss of life?	4.15 (1.05)	4.07 (1.40)	2.32 (1.52)	2.96 (1.68)

Note. GEQ items are endorsed on a scale ranging from 1 (never) to 5 (almost always), indicating the frequency with which the respondent experienced the reaction in question.

[a]natural anticipated
[b]natural unanticipated

Appendix L

Four Suicide Survivors Verbatim Responses Describing Feelings of Relief Experienced after the Death

1. A 19 year old female said of the suicide of her grandmother, who had hung herself, that:

"In a way I did (feel relief) because now she will join my grandfather who had died 8 years previous to her death."

2. A 33 year old survivor whose father had taken his life four years after being in an automobile accident resulting in his being in a quadriplegic state commented that:

"As an adult I have a sense of relief because he suffered greatly and it hurt him terribly to live the kind of life he had. He was slowly killing himself through alcoholism, and depression along with the injuries he suffered."

3. A 19 year old female commenting on the suicide of a teacher at her high school:

"I know she was in a lot of pain and she took lots of medication for it. Throughout the school year she sometimes took her medication in class because it was so unbearable. She was sick a lot also. She would have dizzy spells or shortness of breath during class and would have to sit down. Sometimes it seemed she would pass out. In a way I was glad she wouldn't have to suffer anymore. but I felt sorry for her husband and two young children."

4. A 19 year old female said of the suicide of her grandmother that:

"She was in pain. I didn't want her to die, don't get me wrong, but I don't think there was any other answer."

Appendix M

Suicide Survivors Verbatim Responses as to how they Believe the Death could have been Prevented

1. "If there was someone there for her that she could have talked to or who would have looked over her, this wouldn't have happened. Even if she was to get some sort of counseling."

2. "If different things could have went right in her life, everything was going wrong, one thing good could have changed it."

3. "The person was heavy into drugs and wasn't getting along with his parents. He felt worthless, but if someone had paid more attention to him they could have helped him. They could have taken him to a professional."

4. "He could have told someone else other than me; in his letter he said he was embarrassed for me to see this happen."

5. "He was unemployed, just divorced, and lost custody...had needed perhaps more support or love at the time."

6. "If I had been more attentive, and noticed the warning signs."

7. "We, as his friends, could help him in some ways. He should have talked his thoughts to us."

8. "She was sick and knew it...St. Thomas Hospital would not admit her."

9. "Maybe if everyone was more persistent. Also, if the hotel would have given out information that she in fact was staying there (the night before the morning of the suicide) perhaps she could have been stopped. Also, if she wouldn't have forgotten her medication and if I could have been there!"

10. "There was no form of psychological help for distressed officers in my dad's detachment, if someone was there for my dad to talk to it may have been prevented."

11. "He should have gotten help."

12. "There was no reason for him to have committed suicide."

13. "I should have realized what he was going through and talked to him about it."

14. "We (her friends knew she was depressed about her family life and life in general. The Doctor had put her on anti-depressants). She had called the night of her death but I wasn't home. Sometimes I feel if I was I could have talked her out of it."

15. "By being more understanding and more aware of the 'warning' signs."

16. "She was depressed, only her close family knew it. Depressed people tend to make mountains out of molehills. It was just before Christmas and she had a lot of "molehills" thrown at her."

17. "If someone might have had clues, or had some idea of what she was going to do, perhaps they could have stopped/prevented it, and got her help. Also, she was taking extremely strong and perhaps dangerous mind-altering medication that her doctor had given to keep her from being depressed - which in fact, I've been told, can change certain aspects of the brain structure in ways that might alter a person's behavior or thinking patterns/cognitions."

18. "I wonder if he said certain things that would have given me some indication of how he was feeling and he then could have gotten help."

19. "I think through counselling we could have helped him."

20. "It was due to his girlfriend, thinking she was pregnant and she dumped him for another guy."

21. "If there had been signs of a warning, the suicide may have been prevented."

22. "My aunt was a rough-around-the-edges lady but always had support from her 3 sisters and her children. We all encouraged her to seek counselling but she was too afraid. Had she not been so fearful, she may have obtained counselling she needed and could have tried to start over in her life."

23. "If she turned off her engine. If someone would have found her sooner. If her family would have found her sooner."

REFERENCES

Alexander, V. (1987). Living through my mother's suicide. In E. J. Dunne, J. L. McIntosh, & K. Dunne-Maxim (Eds.), Suicide and its aftermath. Understanding and counseling the survivors (pp. 109-117). New York: W. W. Norton.

Alexander, V. (1991). Grief after suicide: Giving voice to the loss. Journal of Geriatric Psychiatry, 24, 277-291.

Anderson, R. (1968). I never sang for my father. New York: Dramatists Play Service, Inc.

Andress, V. R., & Corey, D. M. (1978). Survivor-victims: Who discovers or witnesses suicide? Psychological Reports, 42, 759-764.

Asgard, U., & Carlsson-Bergstrom, M. (1991). Interviews with survivors of suicide: Procedures and follow-up of interview subjects. Crisis, 12, 21-33.

Barrett, T. W., & Scott, T. B. (1989). Development of the Grief Experience Questionnaire. Suicide and Life-Threatening Behavior, 19, 201-215.

Barrett, T. W., & Scott, T. B. (1990). Suicide bereavement and recovery patterns compared with nonsuicide bereavement patterns. Suicide and Life-Threatening Behavior, 20, 1-15.

Bloom, L. A. (1986). Mourning after suicide. Cleveland, Ohio: The Pilgrim Press.

Bolton, I. (1987). Our son Mitch. In E. J. Dunne, J. L. McIntosh, & K. Dunne-Maxim (Eds.), Suicide and its aftermath: Understanding and counseling the survivors (pp. 85-94). New York: W. W. Norton.

Bugen, L. A. (1977). Human grief: A model for prediction and intervention. American Journal of Orthopsychiatry, 47, 196-206.

Buksbazen, C. (1976). Legacy of a suicide. Suicide and Life-Threatening Behavior, 6, 106-122.

Cain, A. C. (1972). Survivors of suicide. Springfield, Illinois: Charles C. Thomas.

Calhoun, L. G., Selby, J. W., & Selby, L. E. (1982). The psychological aftermath of suicide: An analysis of current evidence. Clinical Psychology Review, 2, 409-420.

Calhoun, L. G., Selby, J. W., & Steelman, J. K. (1988). A collation of funeral directors' impressions of suicidal deaths. Omega Journal of Death and Dying, 19, 365-373.

Carr, A. C. (1975). Bereavement as a relative experience. In B. Schoenberg, I. Gerber, A. Wiener, A. H. Kutscher, D. Peretz, & A. C. Carr (Eds.), Bereavement: Its psychosocial aspects (pp. 3-8). New York: Columbia. University Press.

Carter, B. F., & Brooks, A. (1991). Child and adolescent survivors of suicide. In A. Leenars (Ed.), Life-span perspectives of suicide: Time lines in the suicide process (pp. 231-258). New York: Plenum Press.

Chance, S. (1988). Surviving suicide: A journey to resolution. Bulletin of the Menninger Clinic, 52, 30-39.

Chance, S. (1992). Stronger than death. New York: W. W. Norton.

Cleiren, M. (1993). Bereavement and adaptation: A comparative study of the aftermath of death. Washington: Hemisphere Publishing Corporation.

Conover, W. J. & Iman, R. L. (1981). Rank transformations as a bridge between parametric and nonparametric statistics. The American Statistician, 35, 124-133.

Cohen, J. & Cohen, P. (1983). Applied multiple regression/correlation analysis for the behavioral sciences (2nd ed.). Hillsdale, NJ: Laurence Erlbaum Associates Publishers.

Demi, A. S. (1984). Social adjustment of widows after a sudden death: Suicide and non-suicide survivors compared. Death Education, 8(Suppl), 91-111.

Farberow, N. L. (1991). Adult survivors after suicide: Research problems and needs. In A. A. Leenars (Ed.), Life-span perspectives of suicide: Time lines in the suicide process (pp. 259-279). New York: Plenum.

Farberow, N. L., Gallagher, D. E., Gilewski, M. J., & Thompson, L. W. (1987). An examination of the early impact of bereavement on psychological distress in survivors of suicide. Gerontologist, 27, 592-598.

Farberow, N. L., Gallagher-Thompson, D., Gilewski, M., & Thompson, L. (1992). Changes in grief and mental health of bereaved spouses of older suicides. Journal of Gerontology, 47, 357-366.

Faschingbauer, T. R. (1981). Texas Revised Inventory of Grief manual. Houston, TX: Honeycomb Publishing.

Faschingbauer, T., DeVaul, R., & Zisook, S. (1977). Development of the Texas Inventory of Grief. American Journal of Psychiatry, 134, 696-698.

Glick, I. O., Weiss, R. S., & Parkes, C. M. (1974). The first year of bereavement. New York: John Wiley & Sons.

Goffman, E. (1963). Notes on the management of spoiled identity. New Jersey: Prentice-Hall.

Hauser, M. J. (1987). Special aspects of grief after a suicide. In E. J. Dunne, J. L. McIntosh, & K. Dunne-Maxim (Eds.), Suicide and its aftermath. Understanding and counseling the survivors (pp. 57-70). New York: W. W. Norton.

Hebert, D. A. (1987). My brother Tim and me. In E. J. Dunne, J. L. McIntosh, & K. Dunne-Maxim (Eds.), Suicide and its aftermath. Understanding and counseling the survivors (pp. 95-103). New York: W. W. Norton.

Henley, S. H. A. (1984). Bereavement following suicide: A review of the literature. In M. Morgan & J. Morgan (Eds.), Thanatology: A liberal arts approach (pp. 467-476). London, Ontario: King's College.

Hiegel, S. M., & Hipple, J. (1990). Survivors of suicide; Victims left behind: An overview. TACD-Journal, 18, 55-67.

Holmes, T. H., & Rahe, R. H. (1967). The social adjustment rating scale. Journal of Psychosomatic Research, 11, 213-218.

Horowitz, M., Wilner, N., & Alvarez, W. (1979). Impact of Event Scale: A measure of subjective stress. Psychosomatic Medicine, 41, 209-218.

Iman, R. L. & Conover, W. J. (1979). The use of the rank transform in regression. Technometrics, 21, 499-509.

Kastenbaum, R. R. (1977). Death, society, and human experience. St. Louis: Mosby.

Keppel, G., & Zedeck, S. (1989). Data analysis for research designs: Analysis of variance and multiple regression/correlation approaches. W. H. Freeman & Company: New York.

Lindemann, E., & Greer, I. M. (1953). A study of grief: Emotional responses to suicide. Pastoral Psychology, 4(39), 9-13.

McIntosh, J. L. (1985). Research on suicide: A bibliography. Westport, CT: Greenwood Press.

McIntosh, J. L. (1986). Survivors of suicide: A comprehensive bibliography. Omega, 61, 355-370.

McIntosh, J. L. (1987). Suicide as a mental health problem: Epidemiological aspects. In E. J. Dunne, J. L. McIntosh, & K. Dunne-Maxim (Eds.), Suicide and Its Aftermath. Understanding and Counseling the Survivors (pp. 19-30). New York: W. W. Norton.

McIntosh, J. L. (1993). Control group studies of suicide survivors: A review and critique. Suicide and Life-Threatening Behavior, 23, 146-161.

McIntosh, J. L., Arnett, E., & Thomas, R. (1992, April). Grief and Bereavement instruments: A comparison. Paper presented at the 25th annual meeting of the American Association of Suicidology, Chicago, Ill.

McIntosh, J. L., & Kelly, L. D. (1992). Survivors' reactions: Suicide vs. other causes. Crisis, 13, 82-93.

Ness, D. E., & Pfeffer, C. R. (1990). Sequelae of bereavement resulting from suicide. American Journal of Psychiatry, 147, 279-285.

Noyes, R. (1968). The taboo of suicide. Psychiatry, 31, 173-183.

Parkes, C. M. (1970). The first year of bereavement: A longitudinal study of the reaction of London widows to the death of their husbands. Psychiatry, 33, 444-467.

Parkes, C. M. & Weiss, R. S. (1983). Recovery from bereavement. New York: Basic Books.

Pesaresi, J. (1987). When one of us is gone. In E. J. Dunne, J. L. McIntosh, & K. Dunne-Maxim (Eds.), Suicide and its aftermath. Understanding and counseling the survivors (pp. 104-108). New York: W. W. Norton.

Range, L. M., & Calhoun, L. G. (1990). Responses following suicide and other types of death: The perspective of the bereaved. Omega, 24, 311-320.

Range, L. M., & Niss, N. M. (1990). Long-term bereavement from suicide, homicide, accidents, and natural deaths. Death Studies, 14, 423-433.

Runeson, B., & Beskow, J. (1991). Reactions of survivors of suicide victims to interviews. Acta-Psychiatrica-Scandinavica, 83, 169-173.

Sanders, C. M., Mauger, P. A., & Strong, P. N., Jr. (1985). A manual for the Grief Experience Inventory. Palo Alto, CA: Consulting Psychologists Press.

Saunders, J. M. (1981). A process of bereavement resolution: Uncoupled identity. Western Journal of Nursing Research, 3, 319-332.

Schuyler, D. (1973). Counseling suicide survivors: Issues and answers. Omega, 4, 313-321.

Seguin, M., Lesage, A., & Kiely, M. (1993, May). Parental bereavement after suicide and accident: A comparative study. Paper presented at the 26th annual meeting of the American Association of Suicidology, San Francisco, CA.

Shneidman, E. S. (1969). On the nature of suicide (Ed.). San Francisco: Jossey-Bass.

Shneidman, E. S. (1972). Foreword. In A. C. Cain (Ed.), Survivors of suicide (pp. ix-xi). Springfield, Illinois: Thomas.

Shuchter, S. R. (1986). Dimensions of grief: Adjusting to the death of a spouse. San Francisco: Jossey-Bass.

Solomon, M. (1982). The bereaved and the stigma of suicide. Omega, 13, 377-387.

Stone, H. W. (1972). Suicide and Grief. Philadelphia: Fortress Press.

Tabachnick, B. G., & Fidell, L. S. (1989). Using multivariate statistics (2nd ed.). New York: Harper and Row.

Worden, J. W. (1982). Grief counseling and grief therapy. New York: Springer.

Wrobleski, A., & McIntosh, J. L. (1987). Problems of suicide survivors: A survey report. Israel Journal of Psychiatry and related sciences, 24, 137-142.

Van der Wal, J. (1989). The aftermath of suicide: A review of empirical evidence. Omega Journal of Death and Dying, 20, 149-171.

Van Dongen, C. J. (1988). The legacy of suicide. Journal of Psychosocial Nursing, 26, 9-13.

Van Dongen, C. J. (1990). Agonizing questioning: Experiences of survivors of suicide victims. Nursing Research, 39, 224-229.

Zilberg, N. J., Weiss, D. S., & Horowitz, M. J. (1982). A cross-validation study and some empirical evidence supporting a conceptual model of stress response syndromes. Journal of Consulting and Clinical Psychology, 50, 407-414.

VITA AUCTORIS

Steven E. Marykuca was born in Winnipeg, Manitoba, on November 9, 1967. In June of 1985 he graduated from River East Collegiate in Winnipeg. He then enrolled at the University of Manitoba where he graduated with the Bachelor of Arts (Honours in Psychology) in May of 1992. Since September of 1992, he has been enrolled in the doctoral program in adult clinical psychology at the University of Windsor.